MASTERING LEAD GUITAR TECHNIQUE

SPEED MECHANICS FOR LEAD GUITAR

BECOMING THE BEST YOU CAN BE!

BY

TROY STETINA



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Due to space limitations, some exercises are not on the C.D. All essential material has been left intact.

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ABOUT THE AUTHOR



Photo by John Sibilski

Troy Stetina is Director of Rock Guitar Studies at the Wisconsin Conservatory of Music, Milwaukee, Wisconsin. He is also author of the Hal Leonard series **Heavy Metal Lead Guitar Volumes 1 and 2**, and **Heavy Metal Rhythm Guitar Volumes 1 and 2**, acclaimed by *Guitar Player Magazine* as "...one of the best rock series currently available..." (Nov. '87). Stetina is coauthor of **Heavy Metal Guitar Tricks**, also published by Hal Leonard Publishing Corporation. His recording work has appeared in *Guitar Player* Magazine (Aug. '87 soundsheet demo, *Maniac Music*). With an inclination toward classical music, Troy has transcribed and performed classical violin pieces, including works of N. Paganini. He is the primary songwriter for his band, "Assent."

ACKNOWLEDGEMENTS

I would like to thank the people at the Wisconsin Conservatory of Music, particularly the president, Dr. Patricia Jones, and the Chairman of the Guitar Faculty, John Stropes, for supporting the development of a program for rock guitar. The idea for this book grew out of a class called "Practice Techniques for Lead Guitar," and if not for the support of the Conservatory, the program and classes could not have been offered, and this book may have never been written. Also, many thanks are due all the people at Hal Leonard Publishing Corporation.

Most of all, I would like to thank all of my students, current and former, without whom I would not have been able to formulate and organize the ideas in this book. I would like to mention a few enthusiastic and persevering students who kept me enthused about teaching — they listened, worked, and improved: Takis Kinis (with Realm), Cory Bonnet, Paul Finley, Dan Johnston, Darryl Miescke, and John LaMacchia, just to name a few. Many have let me know that I inspired them, but they might not be aware of just how much they inspired me. During the year and a half that it took to complete this book, much of the work that I did with these and other outstanding students went into this book in one form or another.

FOREWORD

This book teaches what every serious lead player should know — *how* to practice to become the best you can be. It provides a complete understanding of all the skills of lead guitar as seen from a practical, playing viewpoint. By breaking down the complexity of lead playing into component skills, you can focus on each part of the picture, and improve faster. This book will show you what a lead style is, what factors and skills go into it, and how to develop these most quickly. It will help you to express yourself on the guitar, and develop your own personal lead style.

This book is designed with the serious guitarist in mind. This isn't the kind of book that you can whip through in a few weeks, and it's not something that you will outgrow. It is something that you can use for years, because these skills will always apply. As good as you get at any skill taught here, you can still get better, and become a better musician.

If you are a beginner, you should approach it with patience. You need to learn the skills presented here, so take your time. No one becomes a great guitarist overnight! It takes time.

For some of you, this material may not all be new; and any guitarist with well-developed technique has, knowingly or unknowingly, already used many of these principles and techniques. (There is usually a direct relationship between the amount of this type of practicing and the level of mastery attained.) With this book, however, for the first time, these principles and techniques are structured together in a very comprehensive manner, and applied to rock guitar. (Some ideas presented here have been pulled from established violin and piano pedagogy as well.)

The skills you will be developing can be divided into three categories: *Mechanical Ability*, *Rhythmic Ability*, and *Creativity*.

The mechanical aspect deals with the most obvious part — the physical motions to play the notes. It includes left and right hand techniques, methods of developing speed and articulation, etc..

Rhythmic ability is the ability to feel solid and exact timing. This is, of course, an absolute necesssity for every good musician.

In the end, creativity is a most important aspect of playing that is, unfortunately, too often left to chance by guitarists. Creativity involves choosing what notes to play; it deals with developing your musical imagination.

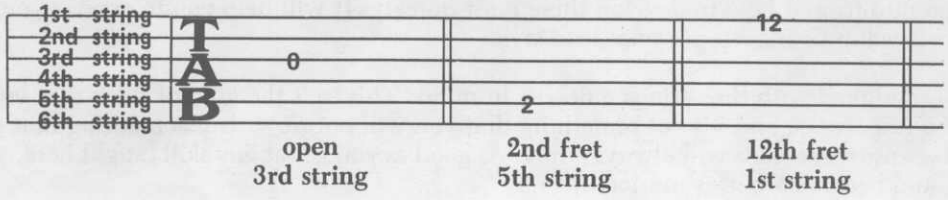
Of course the material in this book is not the *only* thing that you should practice. It covers how to practice, and what skills you need to practice, but *you* must apply these principles to the music you like. All the nuts and bolts in the world are useless until someone puts them together in such a way to make, say, a car. Then you can drive it. The riffs, exercises, and the few selections of music provided are here just to get you on the track of how these practice principles work. Then you can build your own car.

This book is a "practice manual"— a structured system that covers every skill you must have to get complete mastery over the guitar. It shows you where you need to put in your time.

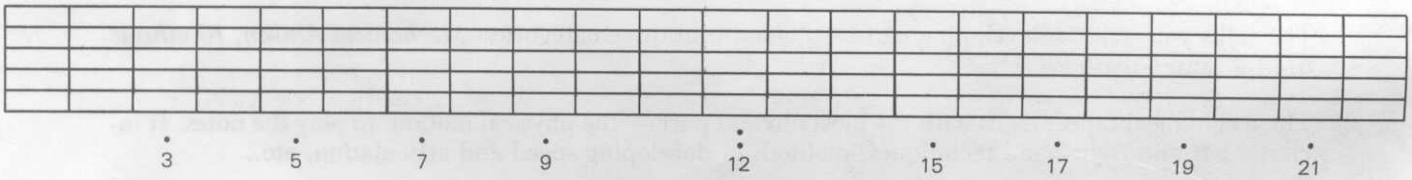
INTRODUCTION

HOW TO READ TABLATURE

Music in this book is written mostly in tablature (TAB), which is a system of notating finger positions by giving a fret number on a line of the tab. Each line on the tab represents a string on the guitar, with the lowest line corresponding to the lowest sounding string.



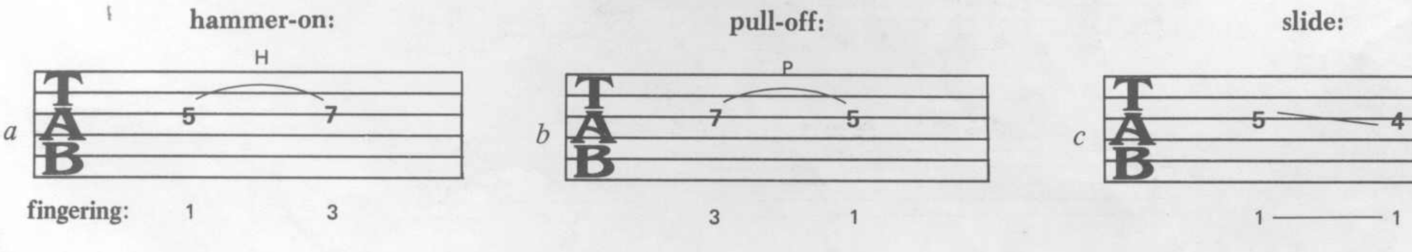
To read tablature more quickly and easily, it is good to memorize the fret numbers of the dot positions on the neck. This becomes especially important when reading fret numbers that are high on the neck. For example, you can find the 18th fret quickly if you know that the second dot above 12 (the double dots) is fret 17. Fret 18 will be one fret higher.



Downstrokes of the pick are indicated by ⊓. Upstrokes are indicated by V. These symbols will appear above the staff.

The fingers of the left hand are numbered as follows: index finger —1
middle finger —2
ring finger —3
little finger —4

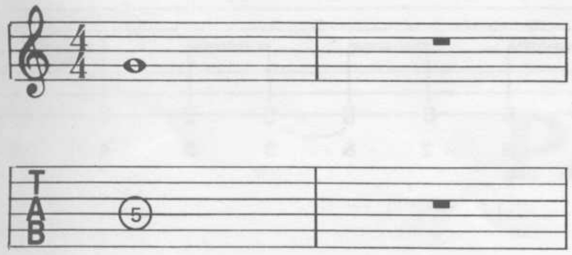
Exercise *a, b,* and *c* show a hammer-on, pull-off, and a slide respectively. For the **hammer-on**, the second note is sounded by hammering down your third finger. The **pull-off** is the opposite of the hammer-on. For this, both first and third fingers should be on their respective frets. Pick the first note, then pull your third finger off and down to sound the second note. For the **slide**, your finger that is fretting the note stays down while the left hand shifts up or down a designated number of frets. Only one finger will touch the fretboard.
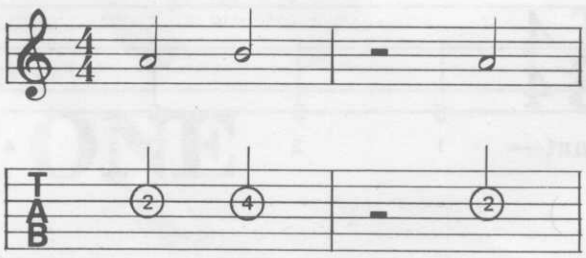


RHYTHM NOTATION

Rhythm notation symbols are shown on the musical staff and below them, the rhythm notation symbols are applied directly to tablature.

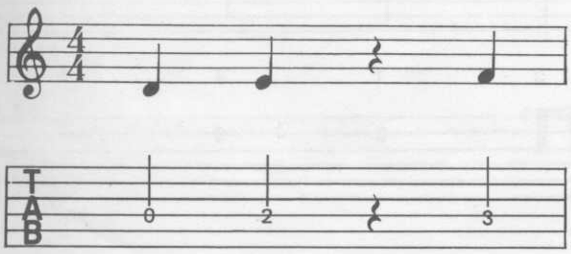
Whole notes and rests:
(four beats each)



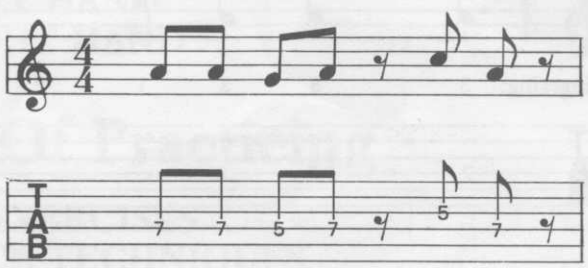
Half notes and rests:
(two beats each)



Quarter notes and rests:
(one beat each)



Eighth notes and rests:
(one-half beat each)

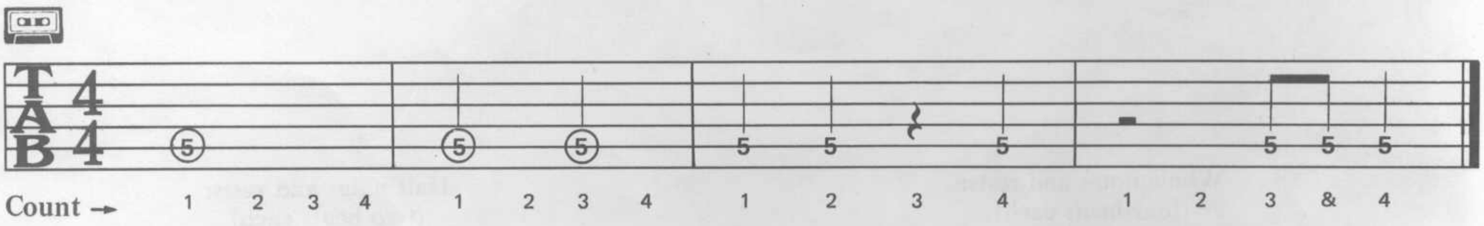


Sixteenth notes and rests:
(one-fourth beat each)
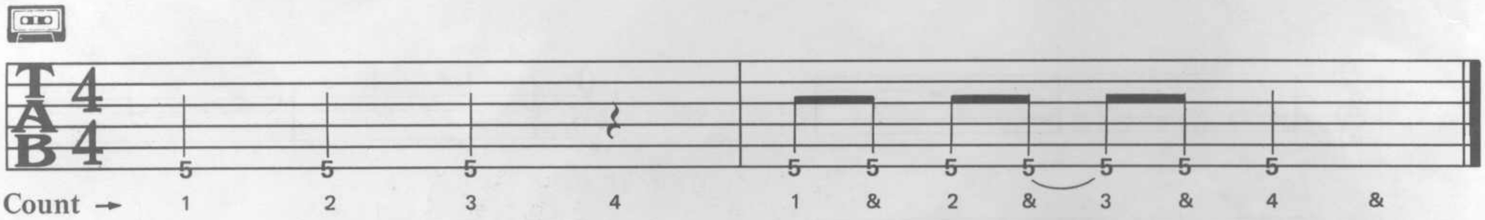


In most cases in this book, the staff is omitted and the rhythm figures are applied directly to the tab as below. Play the following review exercises. The count is written below each tab. If you have any trouble reading basic timing notations, refer to **Heavy Metal Rhythm Guitar, Volume 1,** for more practice.

d

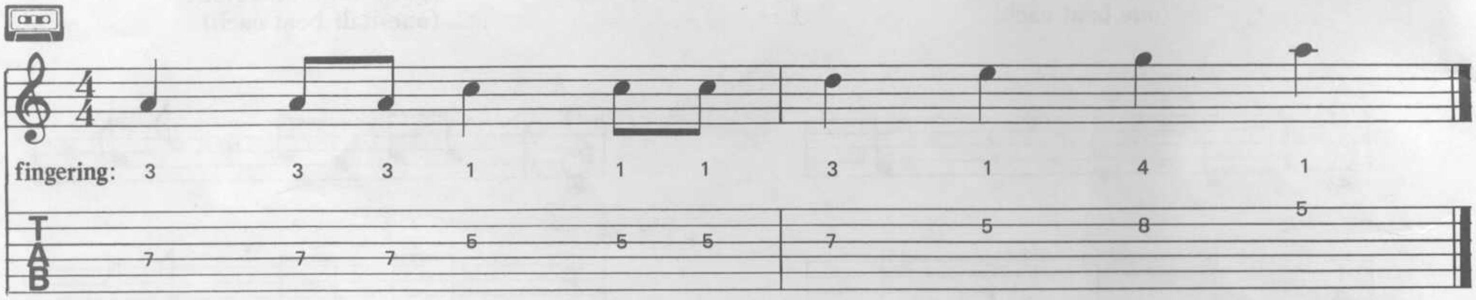


e
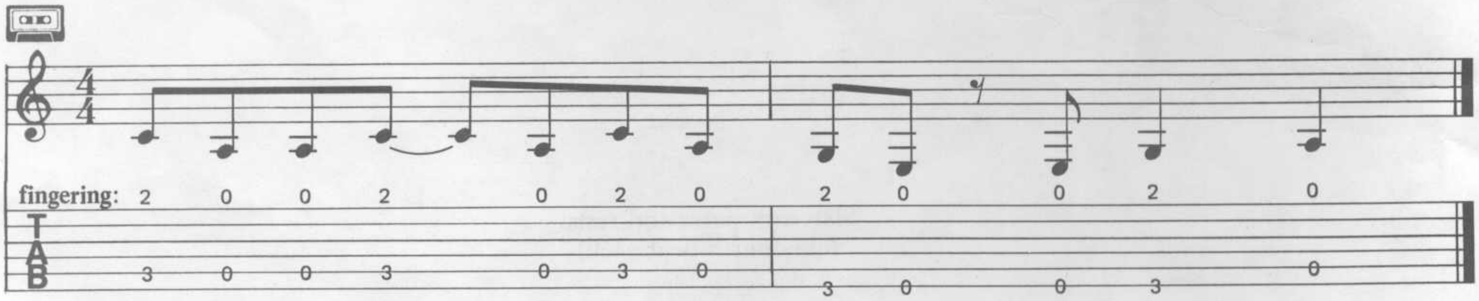


The following exercises use both the staff and tab lines. Here, the rhythm notation is in the staff only. The smaller numbers under the staff are for the left hand fingering.
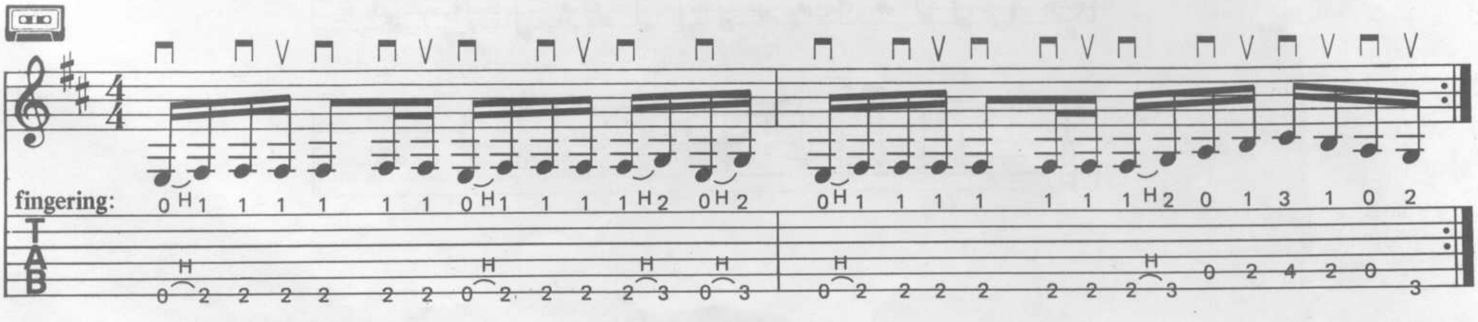
f



g



h



PART ONE

THE MECHANICS OF
PRACTICING EXERCISES

The Basic Motions

THE LEFT HAND
THE RIGHT HAND

The Art Of Practicing

ABOUT EXERCISES...
PRACTICE TECHNIQUES
"THE FLIGHT OF THE BUMBLEBEE"

Building Speed

CYCLIC PATTERNS
SEQUENCE PATTERNS
OTHER SPEED EXERCISES

Sweep Picking

SWEEPING ARPEGGIOS
SWEEP PICKING IN LICKS

For the lead guitarist who truly wants to master the guitar, a playing technique must be developed that will allow him or her to play anything that the imagination can conjure up — any sequence of notes. A consistent format must be developed that can accommodate the myriad possibilities inherent in the instrument, rather than taking a haphazard approach of learning each lick as a special case with its own picking sequence.

In the section "The Basic Motions," the foundation for this format is laid. Left hand exercises establish control, accuracy, and finger independence. Then, cross-string alternating picking is focused on. Each motion is isolated, analyzed, practiced separately, and then used in the context of runs and licks.

Next, in "The Art of Practicing," you'll learn *how* to practice most effectively. You'll learn how to pinpoint what you need to work on and how to design your own exercises to overcome your specific weaknesses. You'll also learn several different practice techniques to achieve better articulation, control, and speed. The piece "Flight of the Bumblebee" finishes this section and allows you the opportunity to apply these practice techniques.

"Building Speed" is next, offering a number of exercises, scale fragments, and sequences that will help you to become faster by focusing on specific, repetitive patterns.

Finally, in "Sweep Picking," various sweeping techniques are covered in detail.

THE MECHANICS OF PRACTICING EXERCISES

Exercises are tools to improve particular skills. They enable you to focus directly on a technique, so that you can develop it faster. By practicing certain exercises correctly you can accomplish in a matter of weeks or months what otherwise may take years.

• **Slow Down.**
Play slowly enough to play without mistakes. Your fingers will move just as you train them to move. If you practice something fast and sloppy a hundred times, why should you expect that the hundred-and-first time will suddenly become clean and precise? However, if you practice something a hundred times perfectly, you can be sure that the next time will be perfect as well.

You can play almost any combination of notes perfectly if you play them slowly enough. Fingers trained slowly (and therefore, more accurately) will be much steadier and more confident. Fingers trained only fast are less controlled and are likely to "freeze up" if you get a little nervous. Think quality, not quantity.

• **Avoid mental blocks.**
If you concentrate so hard that you begin to strain, then tension and anxiety build up to "do it right *this* time." This pressure actually causes you to make more mistakes, and just adds to the frustration. Don't rush yourself. Keep an even and flowing rhythm as you practice. The natural movement associated with rhythm directly opposes the rigidity and stiffness that cause a mental block.

• **Concentrate on the purpose of the exercise.**
Since exercises are designed to focus on developing a certain skill, you should be aware of what that exercise is designed to accomplish and concentrate on that as you practice.

• **Don't spend *too* long on one exercise.**
When a person begins weightlifting, the initial efforts are very tiring. By resting, then working out, then resting again, over and over, the person gets stronger. It's the same with playing guitar. If you play something over and over for too long, you will reach a point where you actually begin to get worse. The best thing to do is rest the particular muscles that you have been working. Play something different, then come back to it later, and you'll be surprised how much easier it becomes!

Caution: If something becomes *painful* to do, don't push it — stop! You can damage your muscles and tendons which can take a long time to heal. Like an athlete, always make sure that you are warmed up well before attempting any exercises that require a lot of strength or stretching.

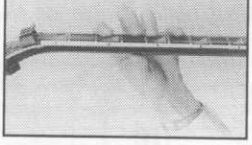
The Basic Motions

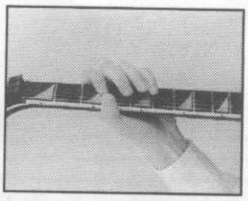
THE LEFT HAND

Thumb Position

There are two basic positions for the left hand: one is with your thumb behind the neck, the other is with your thumb hooked over the top.

The position with the thumb behind the neck gives you a greater reach and allows your fingers to be more evenly controlled. Use this position for scale runs or for riffs in which you need a wider stretch. The other position allows more strength and control for bending strings.

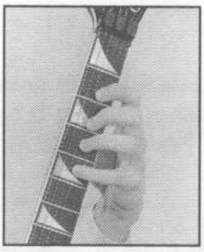




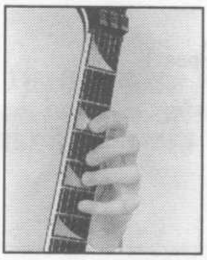
Finger Position

Finger position is denoted by Roman numerals (I, II, III, IV, etc) and refers to the fret that the first finger (on your left hand) occupies.

Position II



Position III



Finger Movement

The further you have to move a finger, the longer it will take to reach its destination. Because *distance equals time*, keep your fingers close to the strings — hovering about a half inch above their respective frets. Eliminate having one finger flip up too far when you hammer or pull another finger. It is too late to correct the mistake after it has happened. You must stop it from happening *before* it happens, if you expect to correct it.

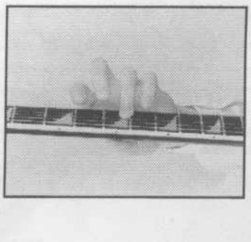
If you cannot comfortably keep your fingers hovering in their unfretted positions, then you are using too much pressure as you play. This extra work is slowing you down.

Left Hand Fluency

Practice lifting the previous finger when the next comes down. This will help to develop a smoother and more flowing left hand, which will make position shifts in runs flow more naturally. (Anchoring one or more fingers is also a very common technique and will be covered as well. You want to be able to play both ways.)

Finger Accuracy

Make it a habit to have each finger land right *behind* its corresponding metal fret bar, not just anywhere within the fret space. This gives your left hand more certainty and exactness.



Play on your fingertips. (You can still lay your fingers at enough of an angle to hold the adjacent strings mute.) There are exceptions, but in general, practicing on your fingertips is best.
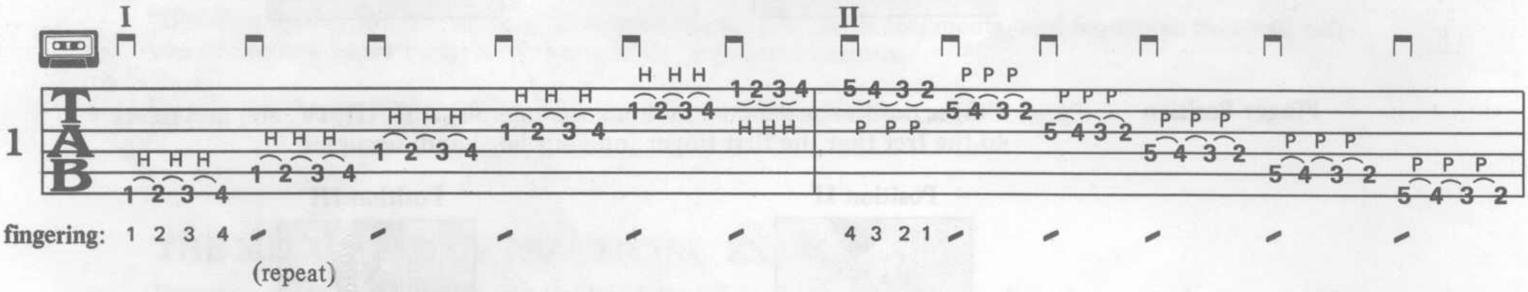
Exercises for Finger Independence
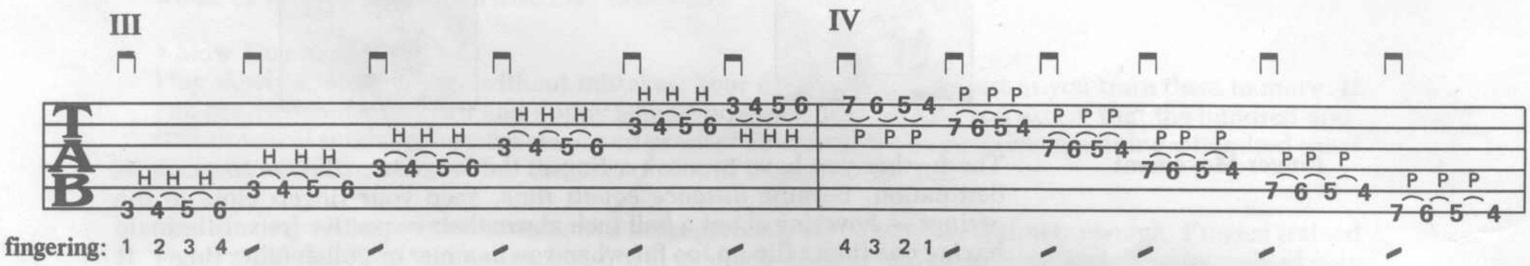
The degree to which each of your left hand fingers can make a movement without affecting the other fingers is called "finger independence." With better finger independence, your left hand will stay more relaxed and new note patterns will come "under your fingers" more quickly and with less practice.

Set your amp for a clean, undistorted sound so that you can really hear what your fingers are doing, and use the "back of the neck" position for your thumb. As with all exercises, practice slowly enough to play perfectly, and feel a steady rhythm without hesitating between or rushing notes. *The key is accuracy and control, not speed!*

Concentrate on:
- *Keeping your fingers close to the strings at all times.*
- *Fretting the strings in the space right behind the frets.*
- *Playing on your fingertips.*
- *Lifting each finger as the next comes down.*

1

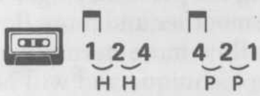




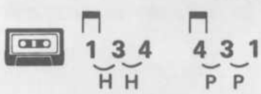
Continue through positions V–VI, VII–VIII, IX–X, then move back down the neck.

Use the same sequence of positions for the following exercises:

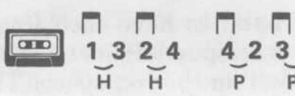
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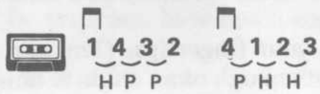
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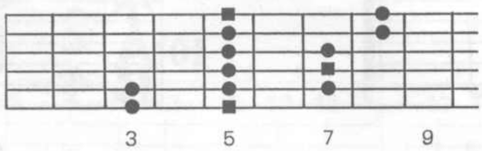
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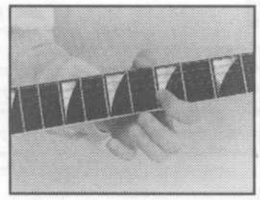


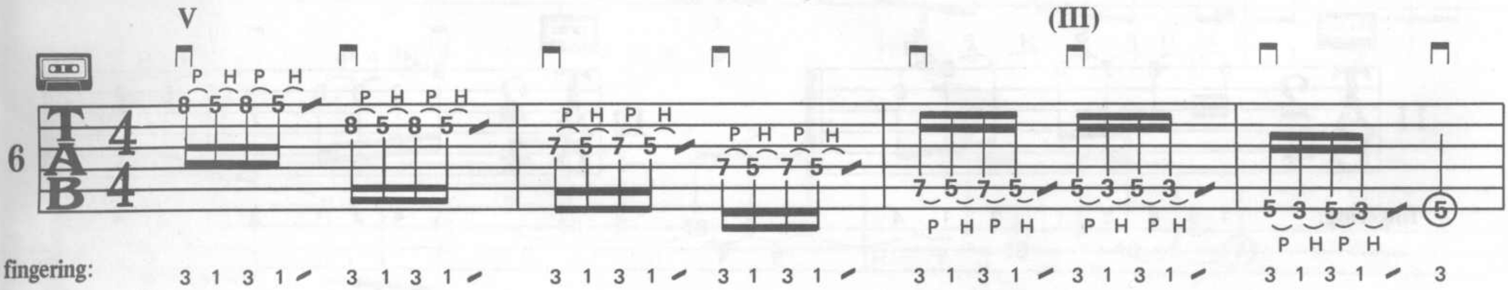
Trill Exercises

A trill is two notes played in rapid alternation. Keep your finger that's playing the lower note anchored down on the fret. To eliminate unwanted string noise, touch lightly and mute the adjacent strings with your first finger (see photo). A slash (⁄) means to repeat the preceding group of notes. Exercise 6 uses a minor pentatonic scale pattern which is shown below.

A minor pentatonic

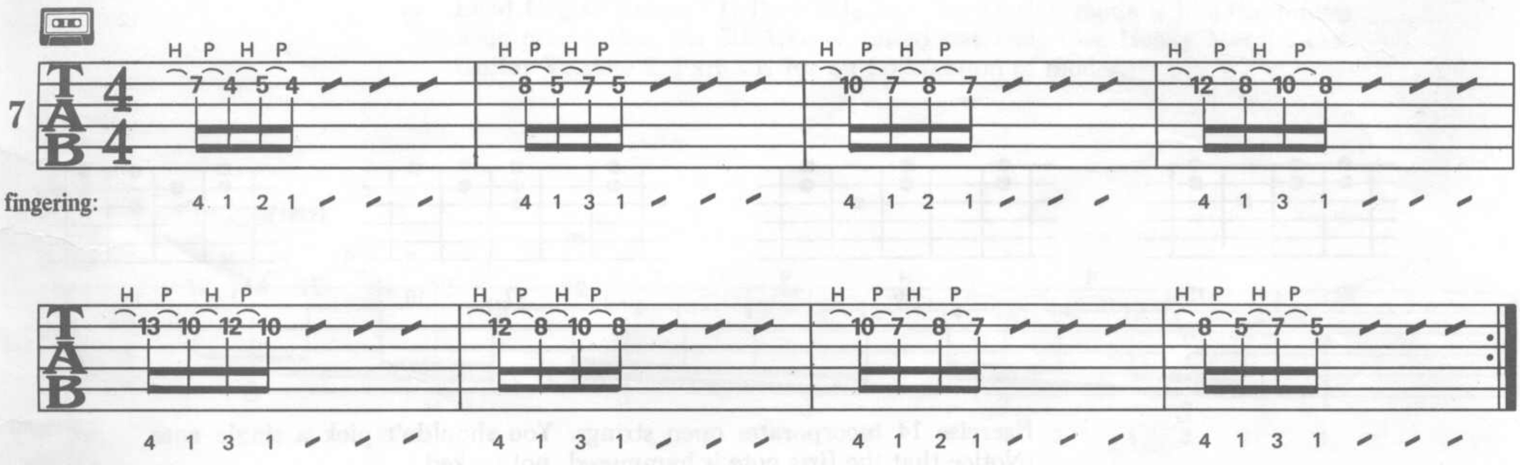




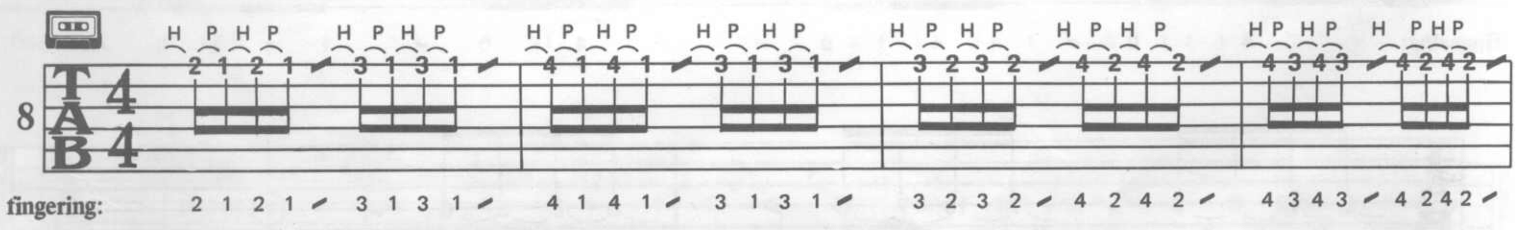


Raise the pattern up one position and repeat.
Continue up the neck to reach the A position one octave higher (XVII).

The next exercise uses a variation on the trill. The first finger remains anchored throughout each group of notes (there are, however, more than two notes in the sequence). Experiment with different trill patterns and different scales.



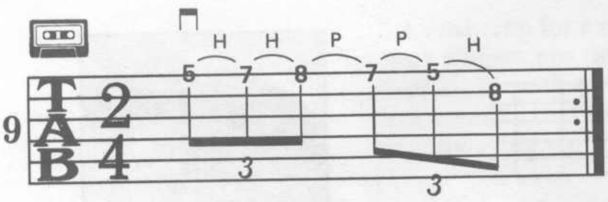
Exercise 8 is a killer! This is particularly good for developing finger independence between your 2nd, 3rd, and 4th fingers. Concentrate on keeping all of the notes even. Practice slowly and remember, if it becomes painful, stop!



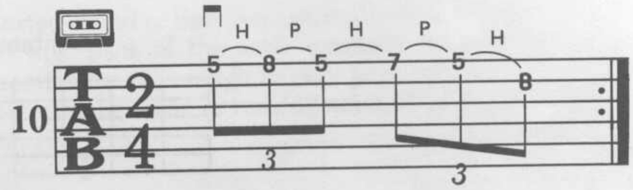
Repeat on strings 2, 3, 4, 5, and 6. Then shift into second position and repeat on strings 6, 5, 4, 3, 2, and 1.

Hammering-on to a New String

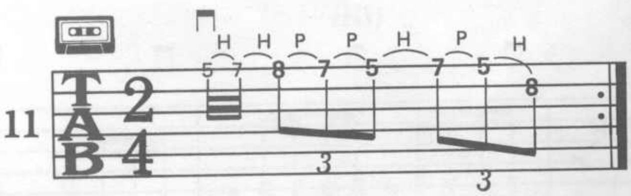
Hammer-ons can also be played on a string without having played a previous note on it. Notice how smooth it sounds. Keep your fingers down as shown. Use your first finger to mute adjacent strings where necessary.



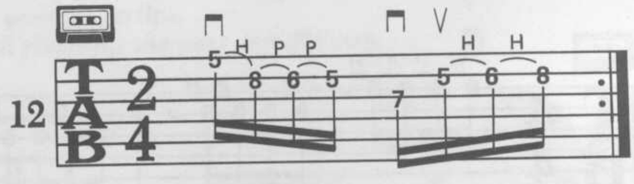
fingering: 1 3 4 3 1 4



1 4 1 3 1 4

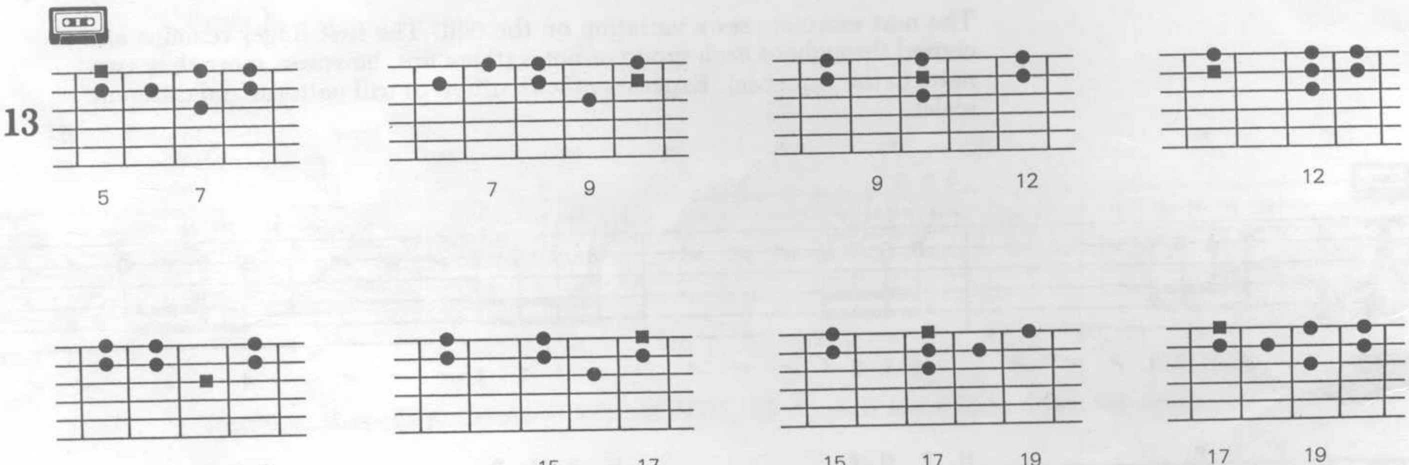


fingering: 1 3 4 3 1 3 1 4

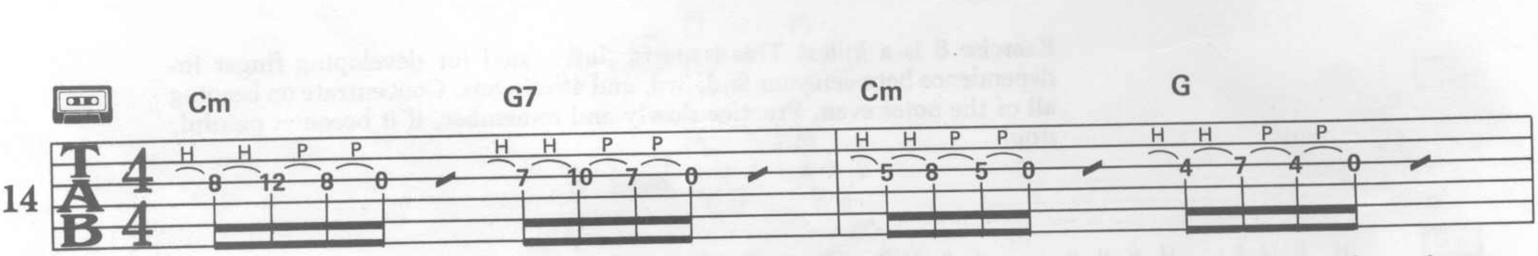


1 4 2 1 3 1 2 4

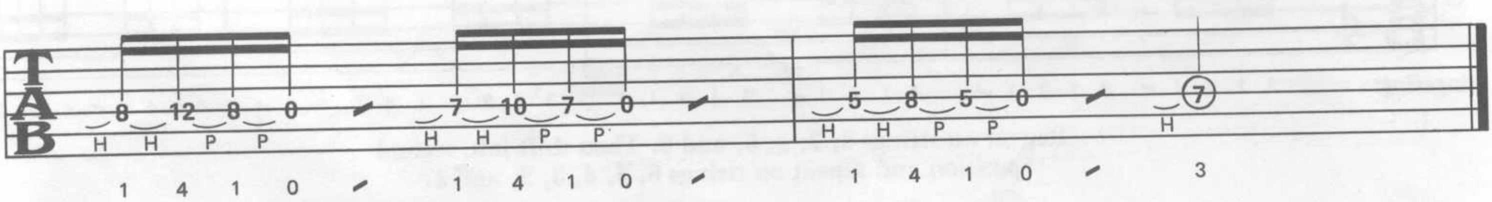
Here are eight patterns in the A minor scale; improvise in these positions. Fingerings and detailed explanation is given on the cassette.



Exercise 14 incorporates open strings. You shouldn't pick a single note. (Notice that the first note is hammered, not picked.)

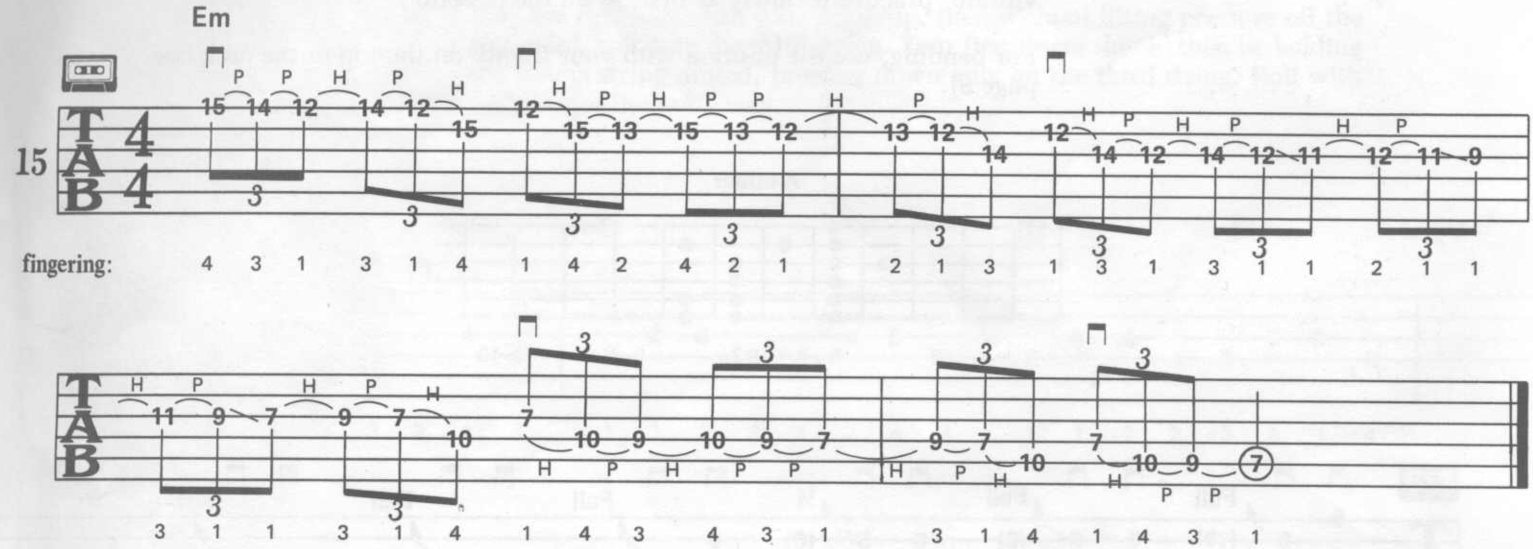


fingering: 1 4 1 0 1 4 1 0 1 4 1 0 1 4 1 0

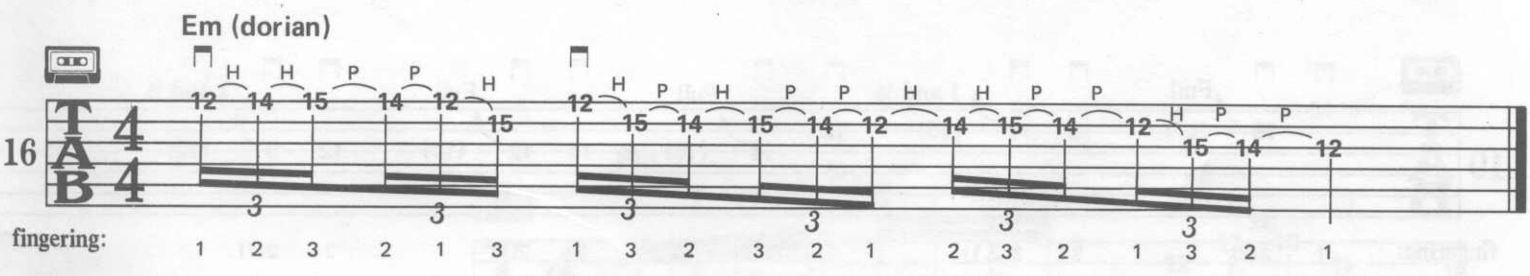


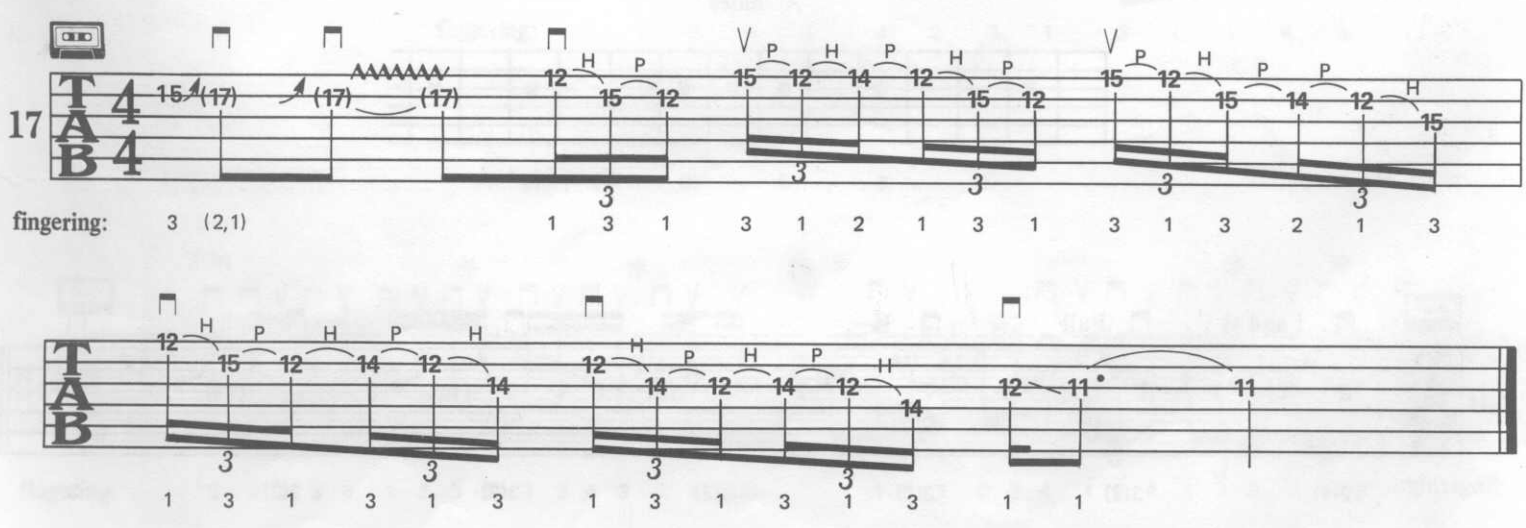
1 4 1 0 1 4 1 0 1 4 1 0 3

Sequence Exercises A "sequence" is a series of melodic ideas that repeats identically, except that it may begin at lower or higher pitches. Scales sequenced in groups of three (triplets) make particularly good left hand exercises.



Notice the sequences used in the licks below. These licks, combining the Dorian mode with the "blues" scale, are typical of the "West Coast" style of lead playing (i.e. George Lynch, Warren Di Martini.) The "blues" scale is a minor pentatonic scale with the addition of the ♭5th tone. (See **Heavy Metal Lead Guitar Volume 1**, Parts III, IV) The Dorian mode is like the minor scale except that the 6th tone is raised one fret. (See **Heavy Metal Lead Guitar Volume 2**, Part VII for an explanation of modes.)



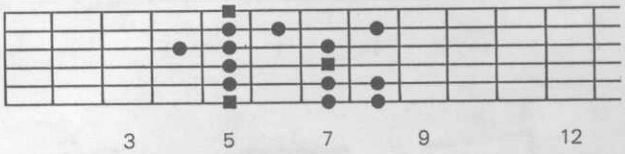


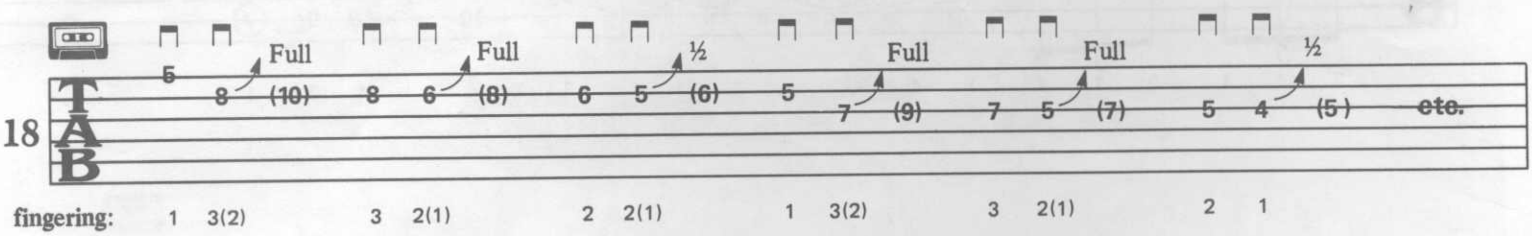
String Bending Exercises

For the lead guitarist, bending and vibrato are some of the most important skills to master. In the exercises below, play the first note, then bend up to the pitch shown. After you have reached the correct pitch, add vibrato. (Vibrato is a series of short bends and releases centered on a particular pitch. After you have bent the string to the right pitch, release the bend slightly and then bend back to the right pitch, again and again. To achieve a smooth vibrato, practice it slowly at first, as on the cassette.)

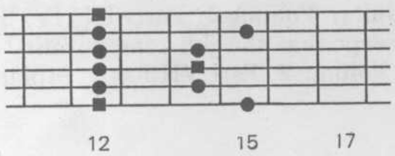
For bending, use the position with your thumb on the top of the neck (see page 9).

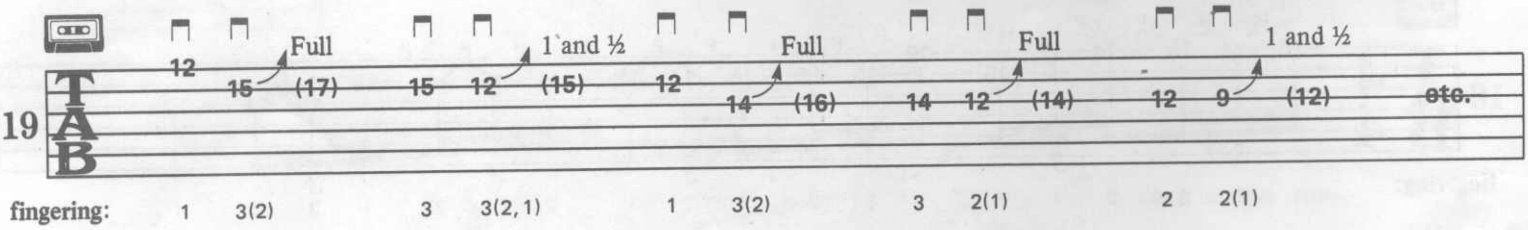
A minor



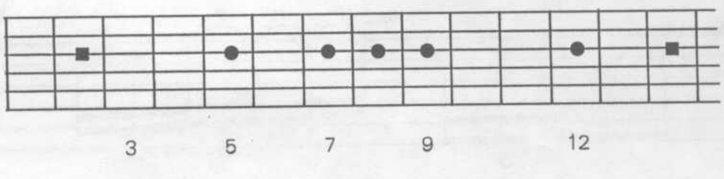


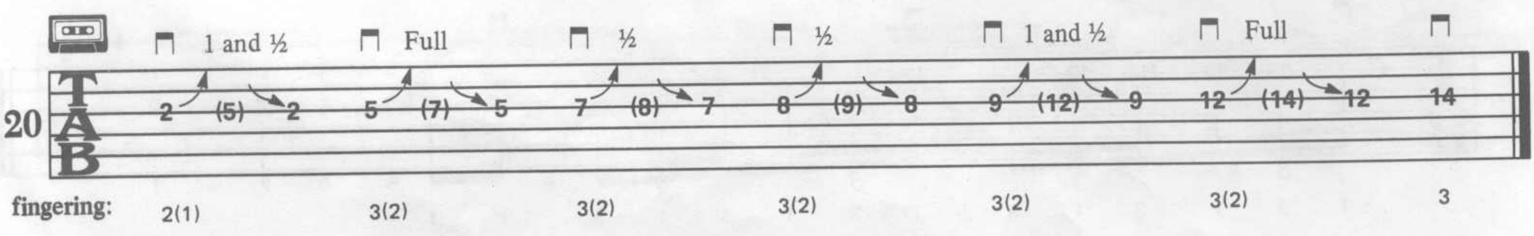
E minor pentatonic





A "blues"

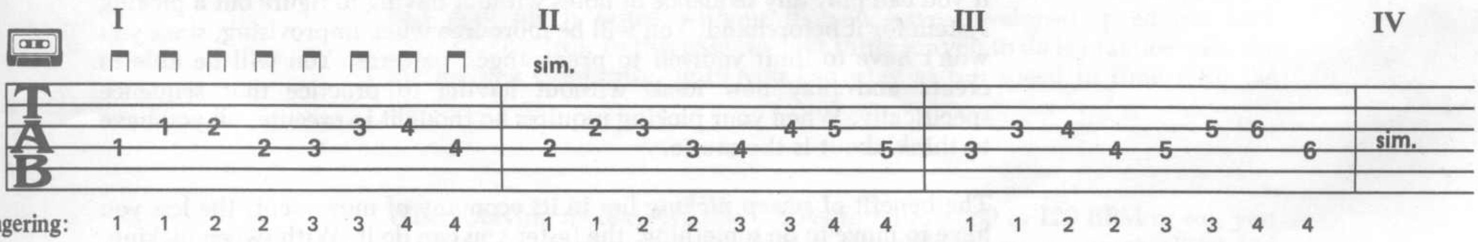




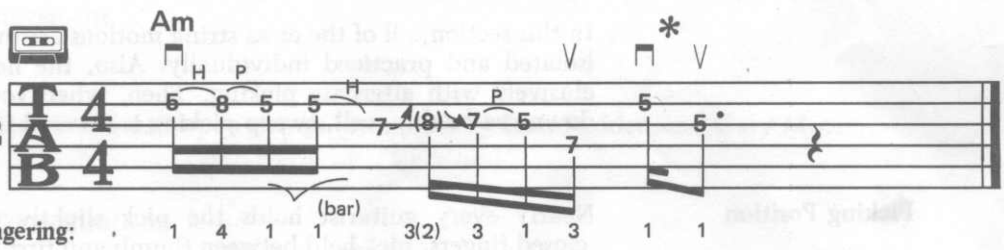
"Rolling" to Change Strings

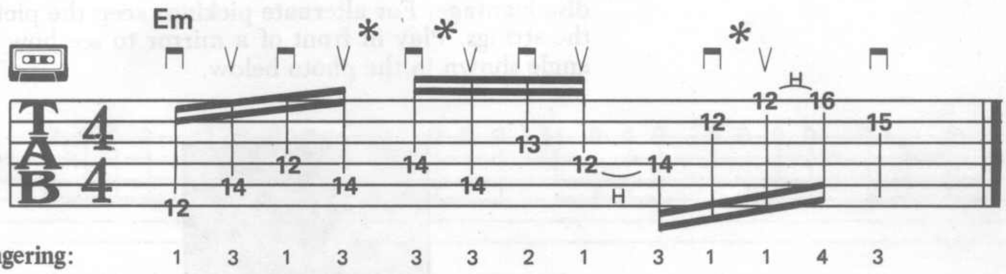
Often, riffs may use two notes that lie on the same fret, but are on adjacent strings. To play this, without letting the notes ring together (as in a chord), you must roll your finger over to the new string and off of the previous string without lifting it off the fretboard. (Lifting your finger off the fretboard to change strings will put a short rest between notes, not allowing them to sound fluent and connected.)

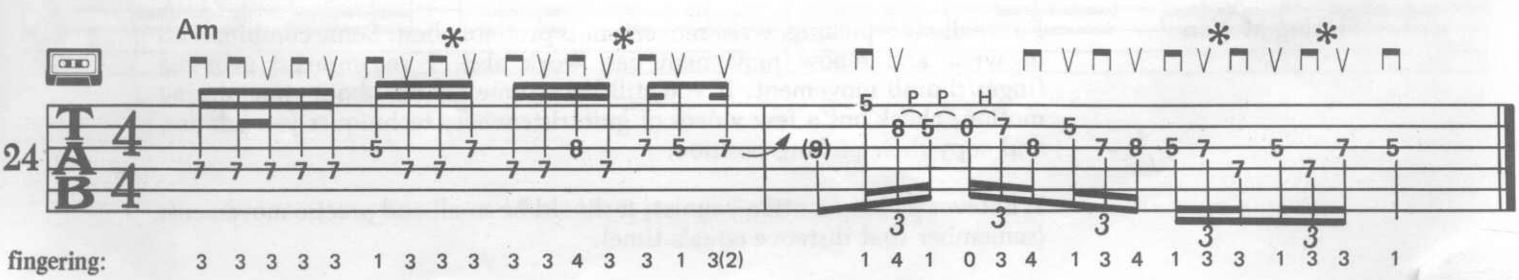
Play the first note with your fingertip, then without lifting pressure off the fretboard, roll onto the third string. Your first finger should then be holding the fourth string muted, pressing down only on the third string. Roll with each finger the same way.

21


An asterisk marks each place to use this technique in the following riffs.

22


23


24


THE RIGHT HAND (Alternating Picking)

Alternating vs. Sweep Picking

There are basically two different approaches to picking. One approach is consistent alternating picking, the other is *sweep picking* (also called "speed" picking or "slip" picking). Each has advantages.

It is good to learn alternating picking first, because it develops a good sense of rhythm. The regular picking motion helps you acquire an evenness of timing that is absolutely essential. Since each note has its own distinct "pick," alternate picking also helps you to develop a clearer, more articulated sound.

A further benefit of developing good alternate picking technique is that with it you can play any sequence of notes without having to figure out a picking system for it beforehand. You will be more free when improvising, since you won't have to limit yourself to prearranged patterns. You will be able to create and play new ideas without having to practice that sequence specifically. When your picking requires no thought to execute, all you have to think about is the music.

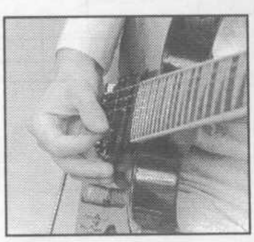
The benefit of *sweep picking* lies in its economy of movement; the less you have to move to do something, the faster you can do it. With sweep picking, you can do things that are impossible with alternating picking. This becomes very apparent when several strings are crossed, with one note played per string.

Because these two picking formats contradict each other in terms of whether a certain note should be played down or up, don't attempt to develop both of these techniques at the same time on the same lick! Practice improves a skill by repetition. Giving mixed signals as to what habit you are trying to develop will just confuse your picking hand.

In this section, all of the cross string motions arising in alternate picking are isolated and practiced individually. Also, the next two sections deal exclusively with alternate picking. Then, when you have alternate picking down reasonably well, sweep picking is covered in detail.

Picking Position

Nearly every guitarist holds the pick slightly different. Open fingers, closed fingers, pick held between thumb and first finger, or second, or both — it doesn't really matter. If you have already developed a certain picking position, it's probably alright. Use what works for you. However, the angle that you hold your pick to the strings is important. If the pick leans too far either way (top of the pick toward the ceiling or the floor), it will put one motion of crossing the strings at an advantage and the opposite motion at a disadvantage. For alternate picking, keep the pick almost perpendicular to the strings. Play in front of a mirror to see how your pick looks from the angle shown in the photo below.



Picking Motion

For really fast picking, wrist movement is probably best. Some combinations of wrist and elbow movement can work also. I recommend avoiding finger/thumb movement. If you still have some doubts about your picking motion, check out a few videos of guitarists whose techniques you admire, and copy their picking position.

Whatever picking motion you use, it should be small and precise movements (remember that distance equals time).

Single String Picking

With your right hand, the first step is alternating on a single string. Play the downbeat with a downstroke. This can be reversed, but downstrokes are naturally easier to accent (with gravity), which gives your playing an easier rhythmic flow.

After you have memorized each exercise, practice with a metronome:

- Begin at about 80 beats per minute (BPM).
- Move the metronome up two units at a time until you reach a comfortable speed.
- Push yourself two units faster, then slow back down one, over and over.
- When you reach top speed, slow down 20 BPM or so, and repeat step 3.

(If you find that you have trouble playing in time with the metronome, yet can play much faster without it, you have developed speed but lack rhythmic control. In this case the best thing for you to do is practice with the metronome constantly, until you can play at top speed in time with the beat.)

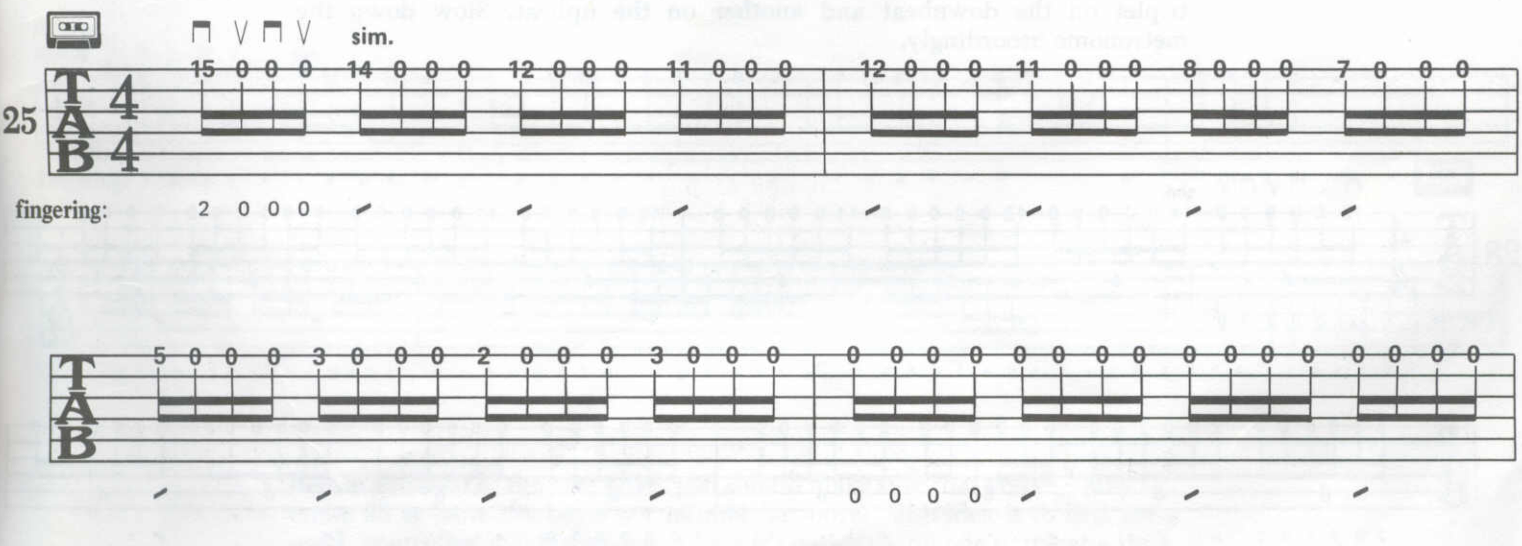
When playing moderately fast (sixteenth notes at 80 to 120 BPM or so), you can get away with extra movement of the pick. When you reach about 144 BPM or higher, however, there is no time for wasted movement.

Because of this, when you are playing slowly, concentrate on making the picking motions as small as possible, eliminating any extra movement of the pick. *Your pick should move up and down only, without and motion away from the strings.* If you have made a habit of too much movement in the picking, you might try skipping right up to somewhere around 144 BPM. This can force your pick to get in the habit of making smaller movements. Then work back down, concentrating on maintaining the smaller picking movement.

Exercise 25 uses open strings (as in riffs by Iron Maiden and Gary Moore).

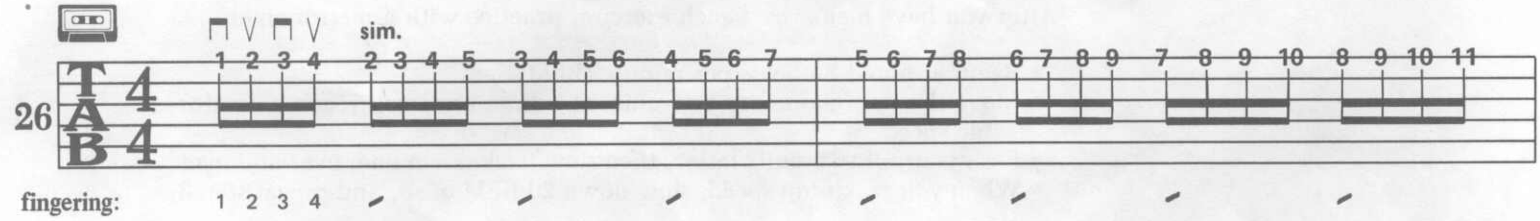
Concentrate on:
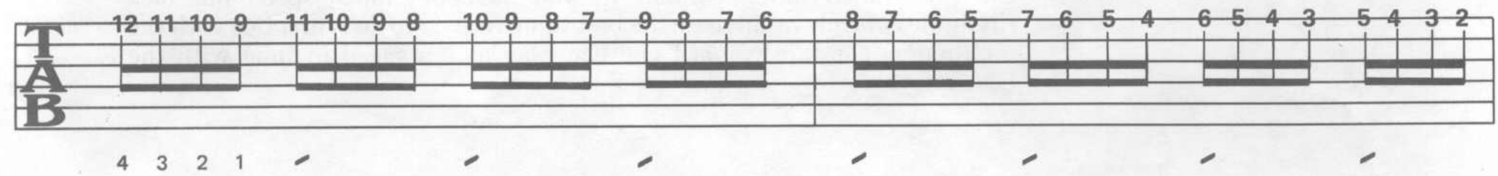
- *Making only small up and down movements with the pick.*
- *Following the instructions above for using a metronome.*



Repeat on strings 2, 3, 4, 5, and 6.

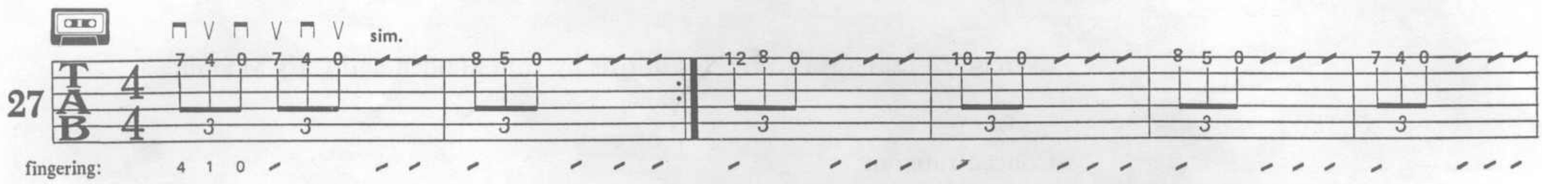
Exercise 26 uses a chromatic sequence. ("Chromatic" means using every half-step rather than following a diatonic [seven tone] scale.)





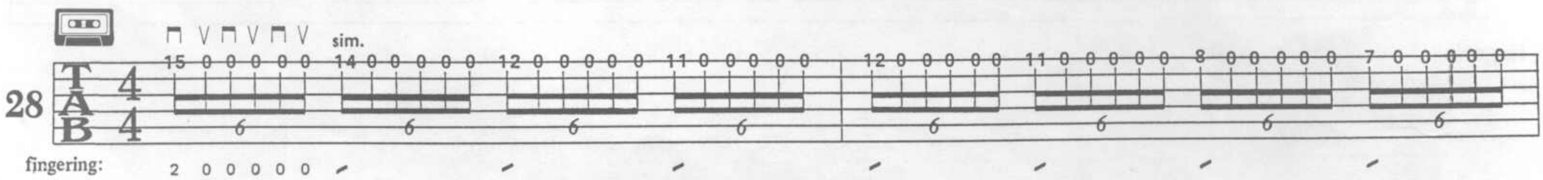
Repeat on strings 2, 3, 4, 5, and 6.

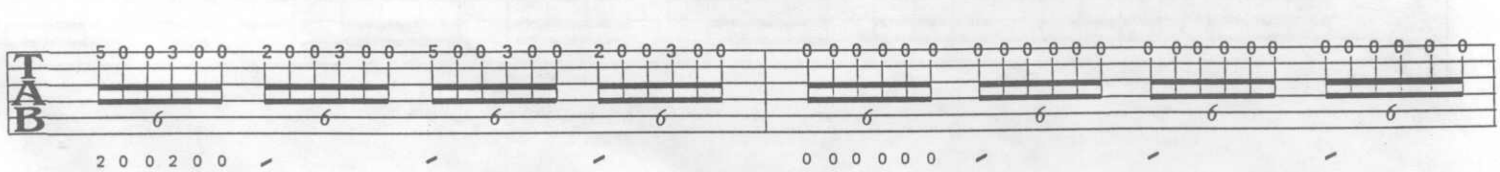
Exercise 27 uses three notes per beat (eighth note triplets). This is similar to the lick from Randy Rhoads' live *"Suicide Solution"* solo (right before the two-handed tapping part).



Repeat on strings 2, 3, 4, 5, and 6.

Exercise 28 is similar to 25, but uses six notes per beat (sextuplets). You can think of six notes per beat as sixteenth note triplets, with one three-note triplet on the downbeat and another on the upbeat. Slow down the metronome accordingly.

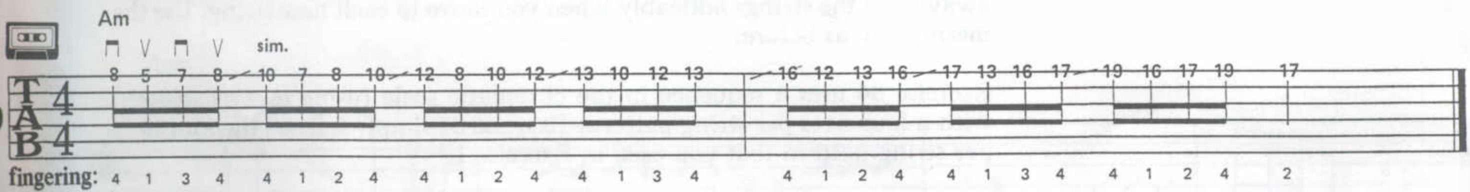




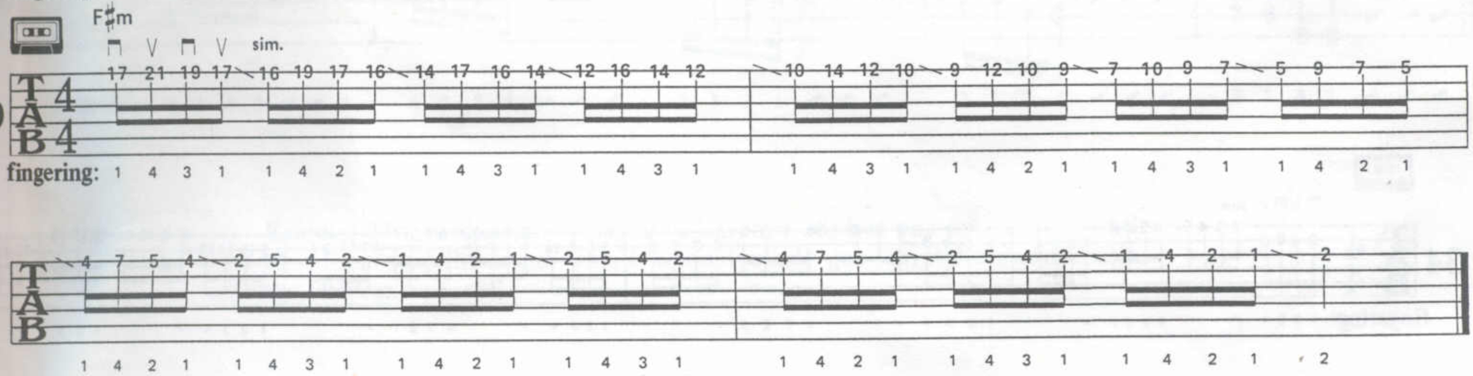
Repeat on strings 2, 3, 4, 5, and 6.

Exercises 29 and 30 move up and down minor scales on a single string, similar to licks in the style of Yngwie Malmsteen.

29

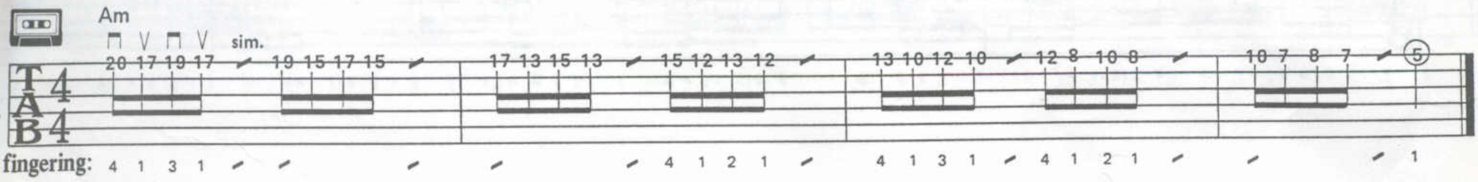


30

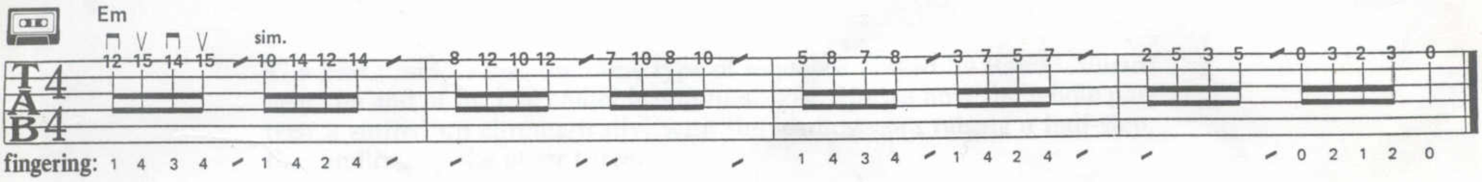


Exercises 31 and 32 use different sequences to move down the scale.

31

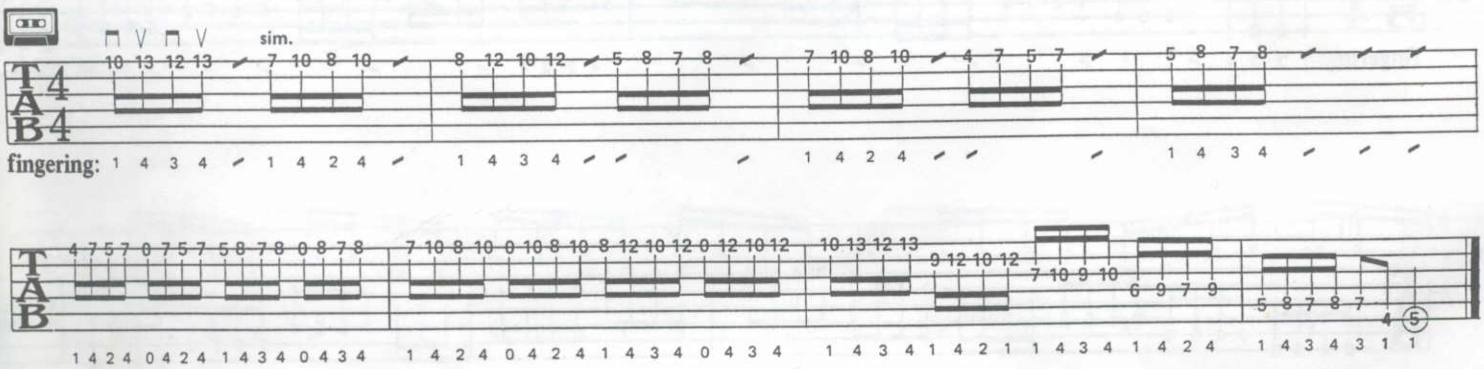


32



Exercise 33 implies a chord progression giving it that classical "Malmsteen" sound.

33



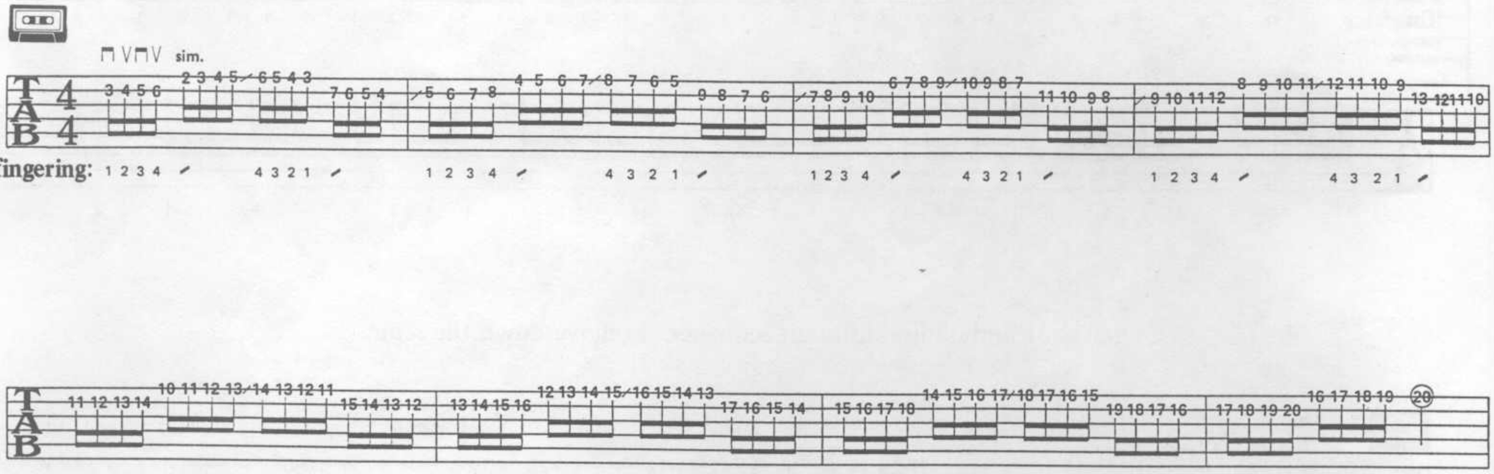
Before going on to the next page, you should make sure that you can play Exercise 25 at least 132 beats per minute (or more). The idea is to first get a good, controlled picking motion where it's easiest — on one string at a time. Then, in the following pages, you will work on applying this picking technique to crossing between strings.

Leading with a Downstroke

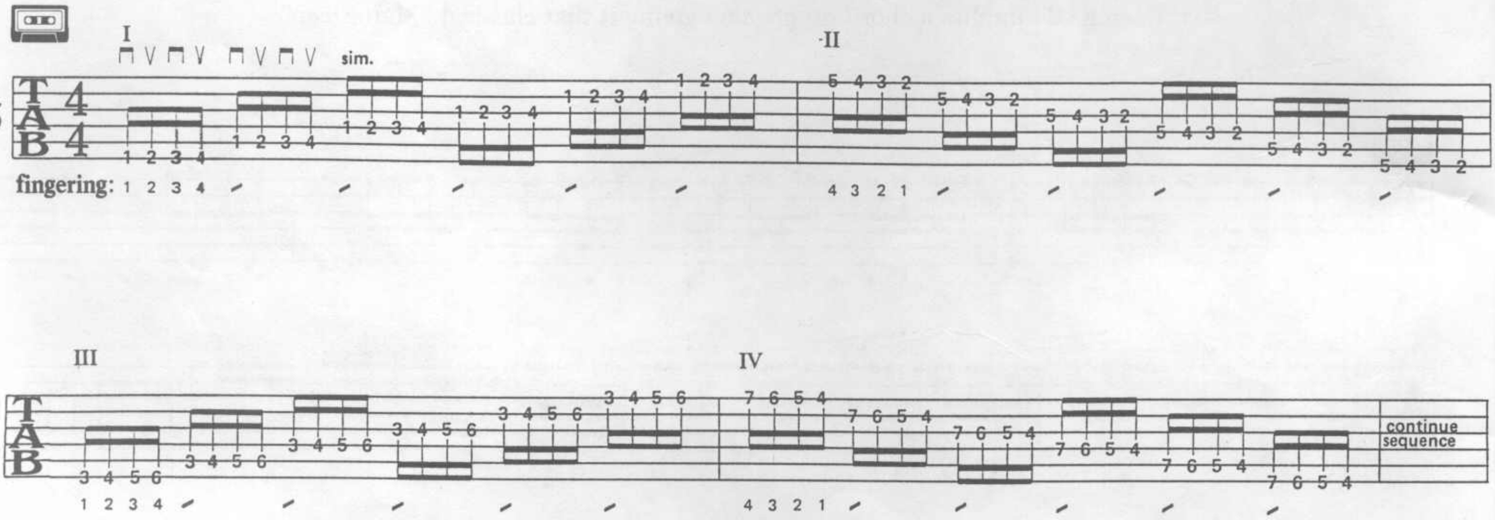
Here, you will be changing strings: first, leading to each new string with a downstroke, in groups of four. The idea is to apply the same small picking motion that you have developed, to crossing the strings. Watch your picking hand in a mirror as you practice to make sure that the pick doesn't come away from the strings noticably when you move to each new string. Use the metronome as before.

Exercise 34 uses a sequence in the chromatic scale (using every half-step) with a four note per string pattern. Exercise 35 simply follows the four note per string pattern that you used in Exercise 1.

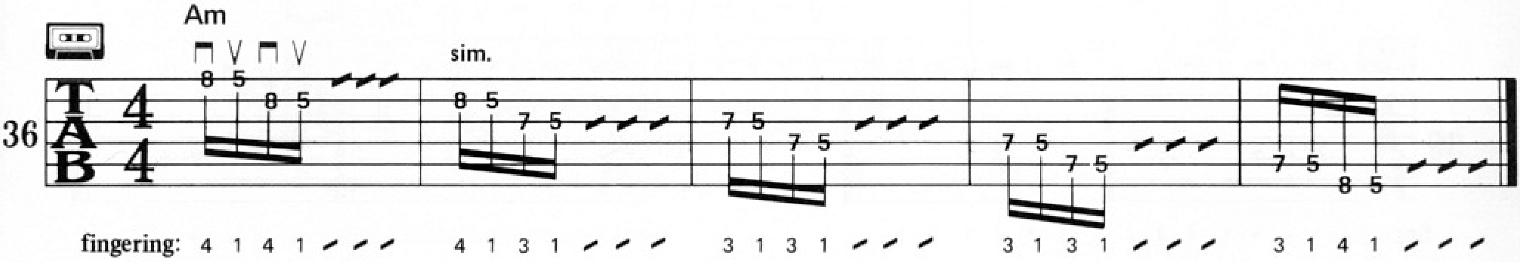
34



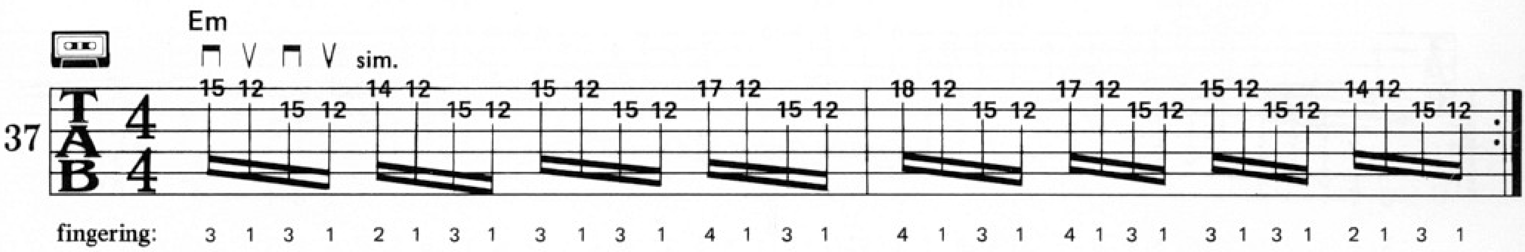
35



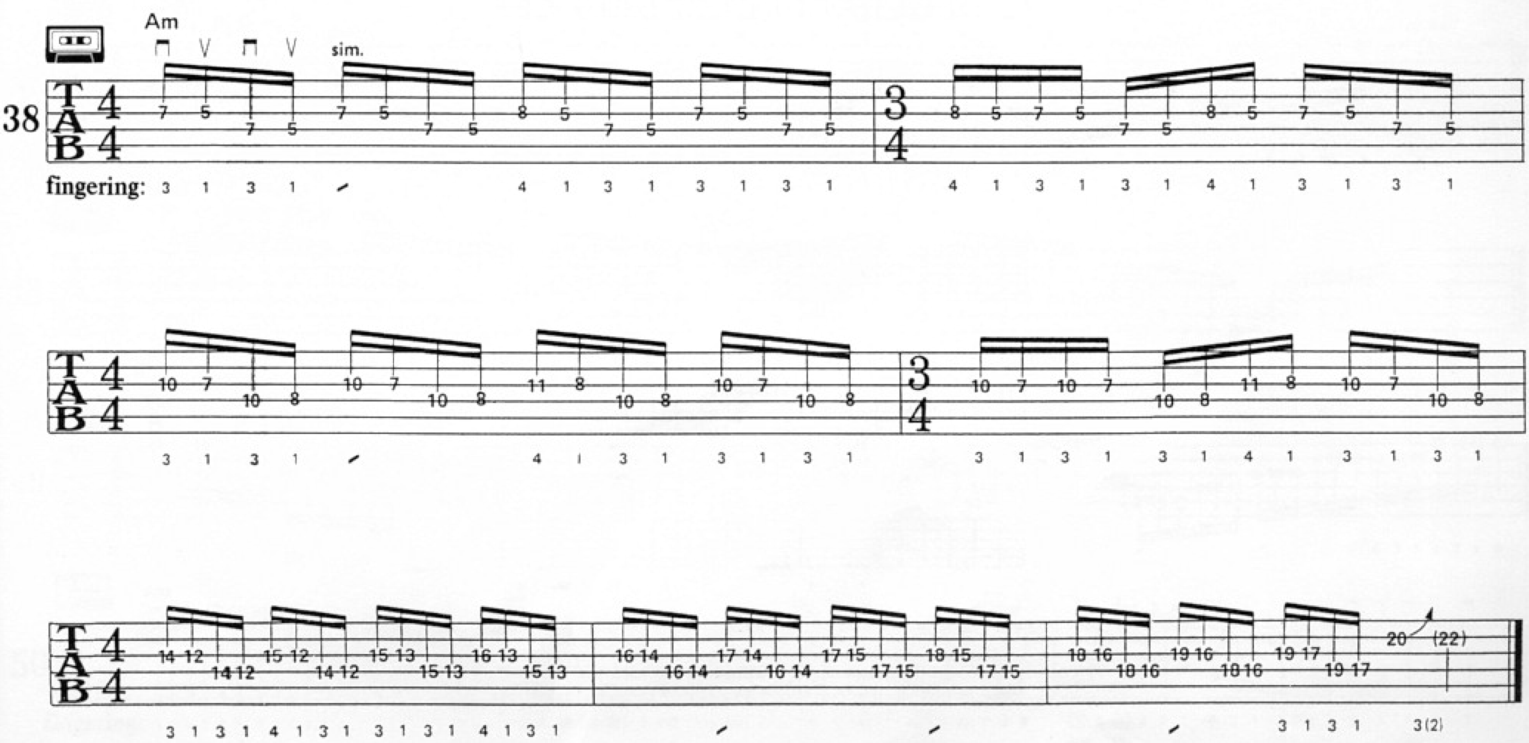
Playing two notes per string is still the same type of motion as playing four notes per string. You always lead to the new string with a downstroke.



Exercise 37 uses the same picking as Exercise 36, but one note moves while the others stay the same. This is a particularly good stretching exercise for the left hand as well.

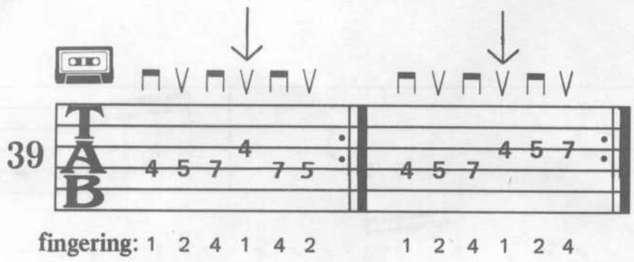


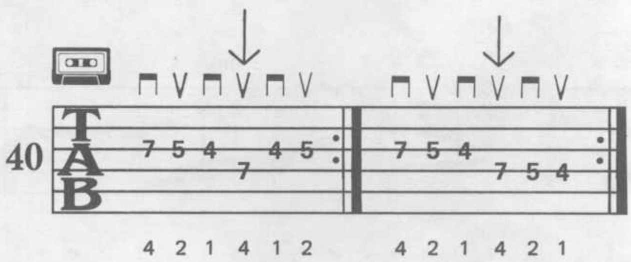
The next example uses the same type of sequence played by Randy Rhoads near the end of his live "*Suicide Solution*" solo. Notice how the whole pattern is shifted up chromatically, with the leading note raising a half-step, then pulling up the other three.

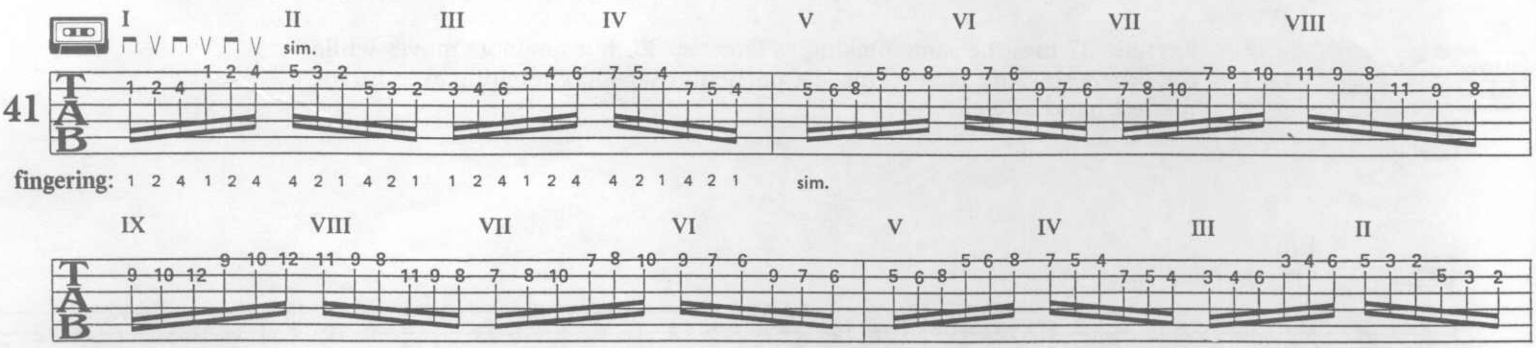


Leading with an Upstroke

All of the previous exercises have led with a downstroke to each new string. However, when you play patterns with three notes per string, the pick crosses over and leads with an upstroke. Watch your picking hand in a mirror as you practice these exercises to make sure that your pick stays close to the strings, without any extra movement.

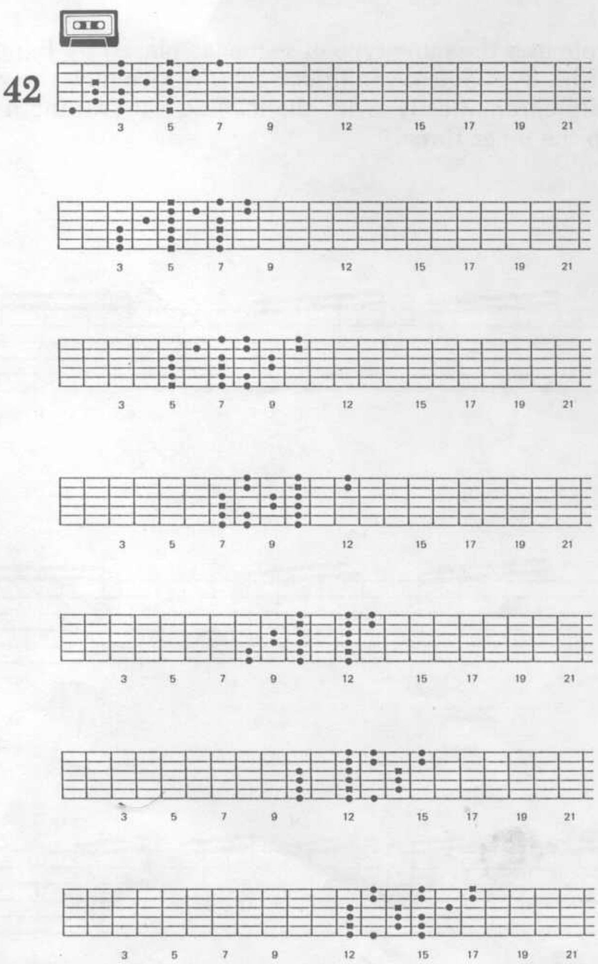






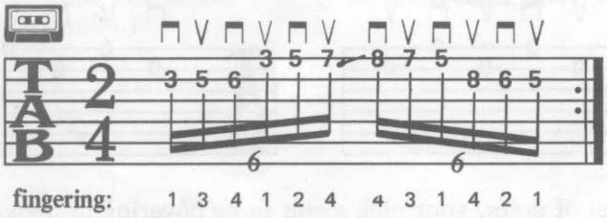
Repeat on strings 3, 4 and 5, 6.

Memorize the three note per string scale patterns for A minor in each position on the neck. Fingerings and picking sequences are explained on the cassette.

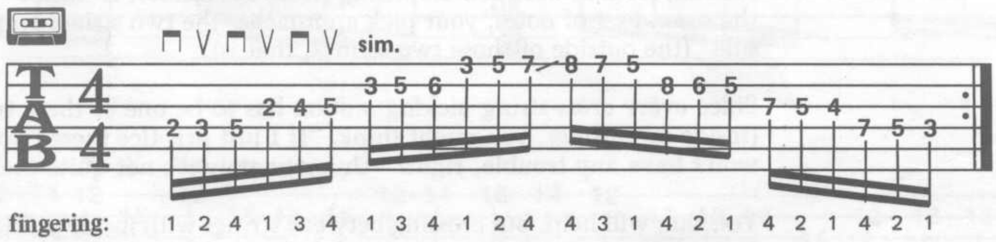


The three exercises below use the first and second scale patterns you have just learned on the previous page.

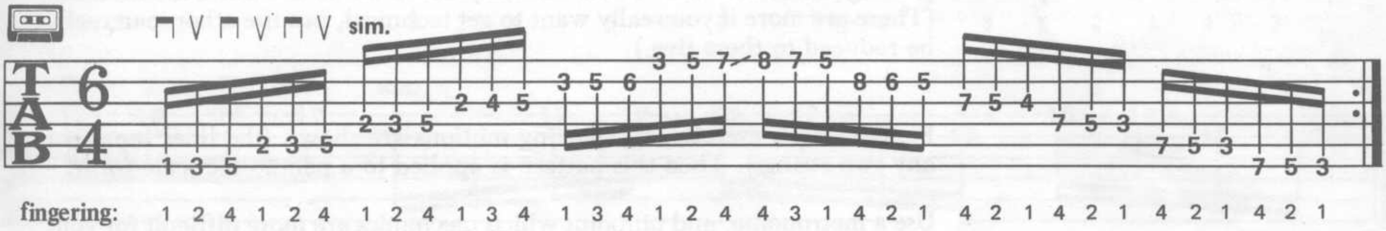
Play up the top six notes of the first pattern, then shift up into the second pattern to descend:

43 

Now, add strings three and four:

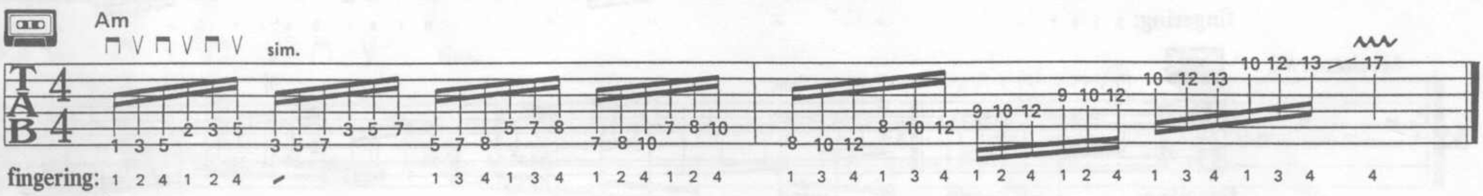
44 

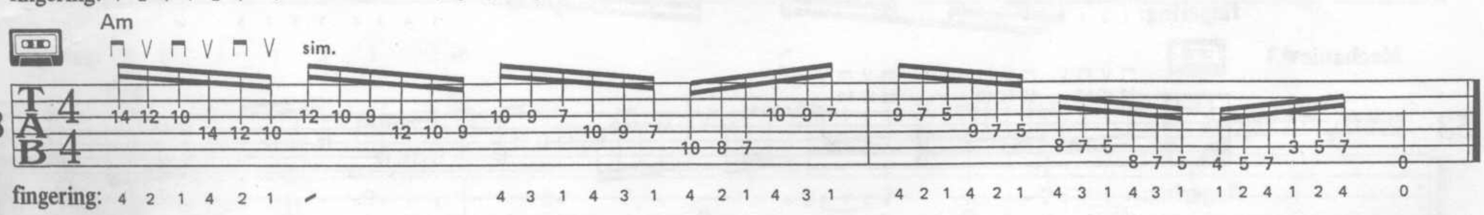
Add strings five and six:

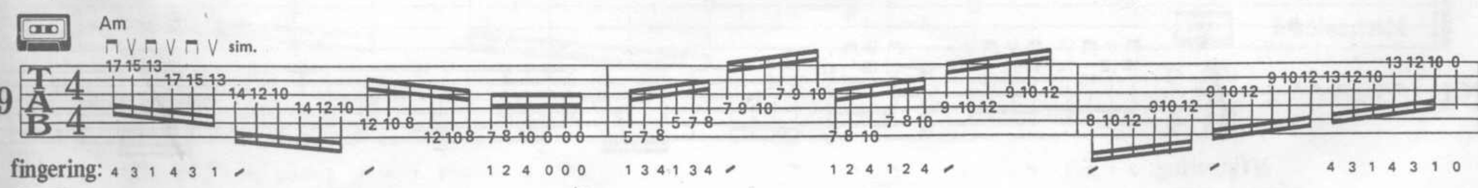
45 

46 Now, apply the same idea you just used in the above exercises to the rest of the scale patterns shown in Exercise 42. Details are on the cassette.

The following licks show several run ideas you can build on. Although the notes change, mechanically it remains the same movement (groups of six). This makes it relatively easy to play fast, because all you need to master is one basic mechanic. The scalar oriented runs which make an important part of today's faster playing styles, are often three note per string patterns.

47 

48 

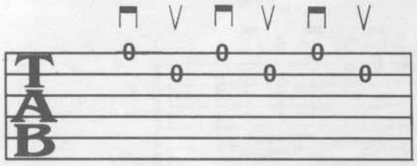
49 

50 
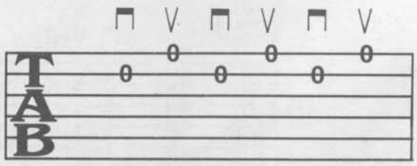
Cross-String Picking Mechanics

There are basically two different ways to cross between strings. I call them "*inside picking*" and "*outside picking*." Play the example below and notice the difference between the first group of notes and the second group.

"Inside" Picking



"Outside" Picking



In the first set of notes, your pick seems to be hovering in-between the two strings, moving out from the center to pick the strings. This type of picking motion, from in-between the strings (from the *inside*), is "inside" picking. In the second set of notes, your pick approaches the two strings from the "outside" (the outside of those two strings, that is).

Since every cross-string picking motion has to be one of these two motions (inside or outside), you might think, "If I just practice these two motions, I won't have any trouble, right?" Unfortunately it's not quite that simple.

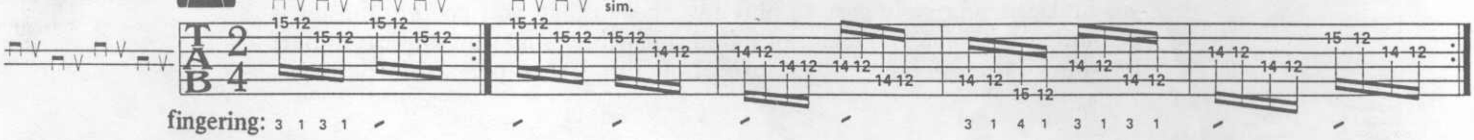
Yes, that will help, but crossing between strings with inside picking feels different when most of the notes are played on a higher string then when most are played on a lower string. Because of this, I have isolated five cross-string picking mechanics that I feel basically cover all of the different motions. (There are more if you really want to get technical, but the others can really be reduced to these five.)

First, in each exercise, the picking motions are shown (the lines represent any two strings). Then this pattern is applied to a pentatonic scale form.

Use a metronome, and pinpoint which mechanics are more difficult for you, and concentrate mostly on those. You will improve fastest by working out your trouble spots. (If you have trouble with a particular mechanic, you will have problems every time you play a run in which it occurs. Of course, you can avoid it but that doesn't get you much closer to mastering the guitar and being able to express yourself freely.)
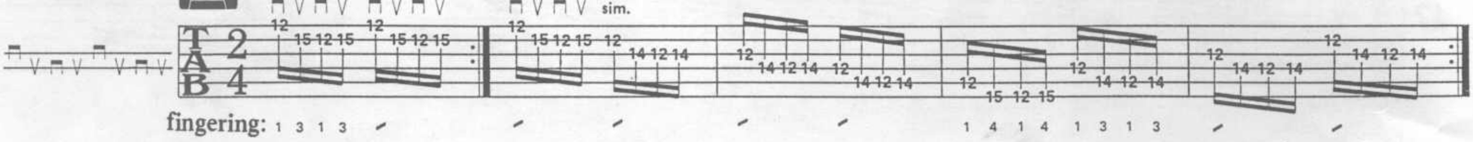
Mechanic #1

51
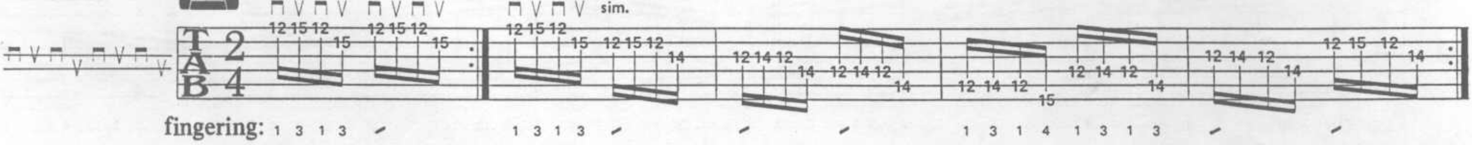


Mechanic #2

52
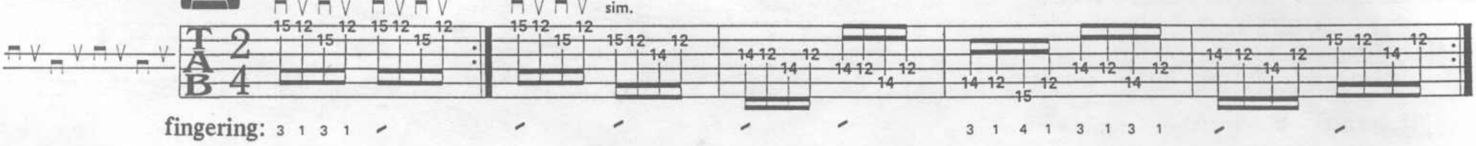


Mechanic #3

53
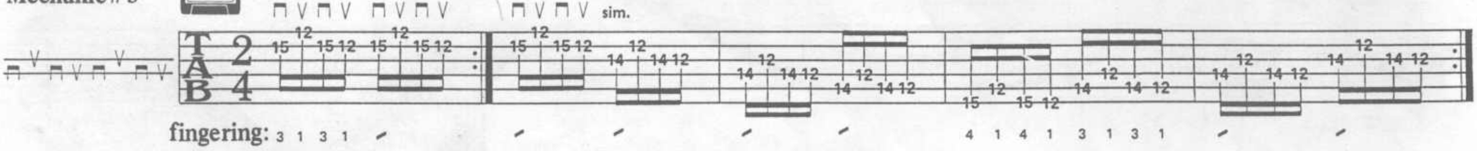


Mechanic #4

54

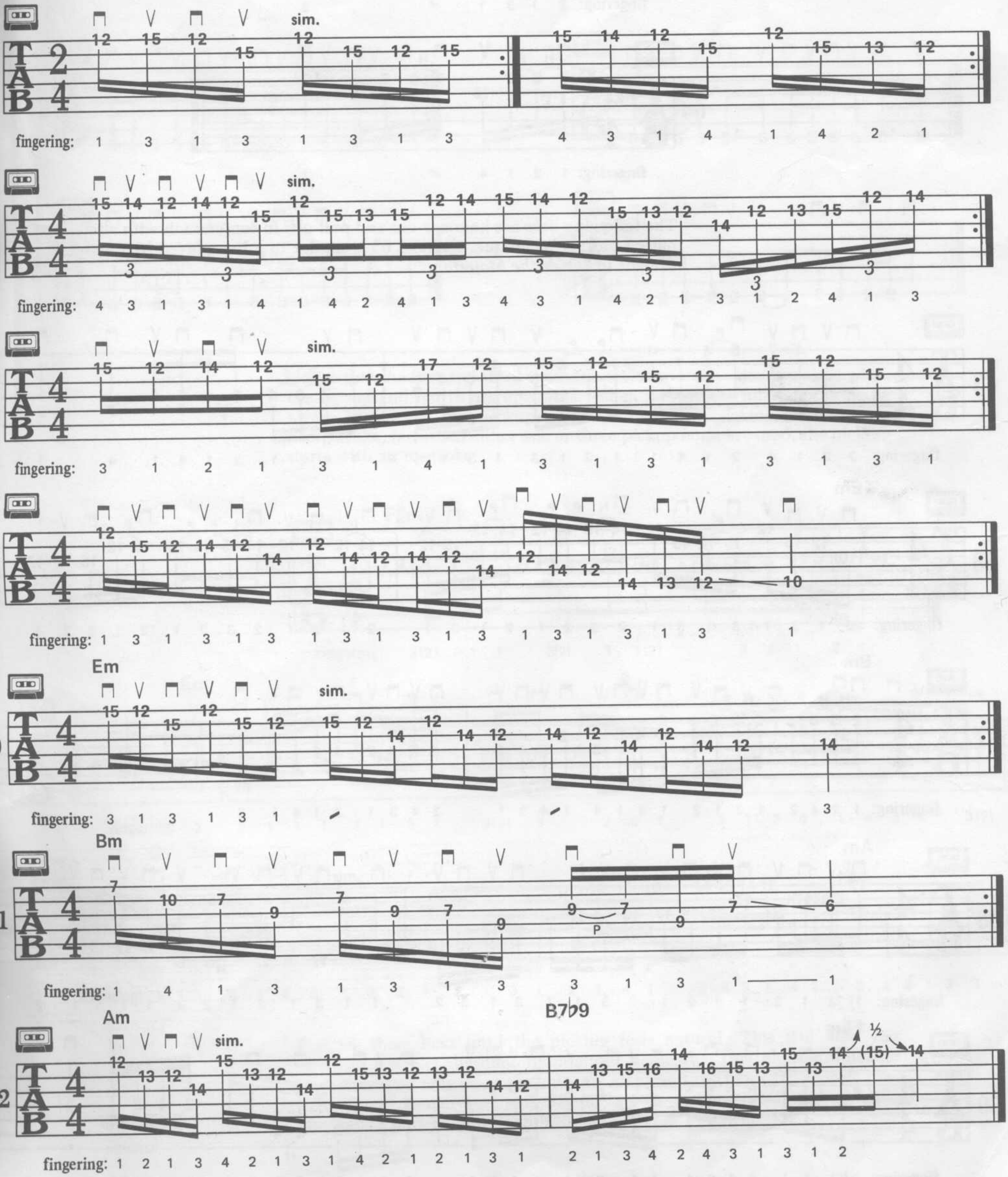


Mechanic #5

55



The following exercises combine the previous mechanics in various sequences. Notice whether the cross-string picking is "inside" or "outside" picking. Also, see if you can figure out which mechanics (1-5) are used for each beat. (When the notes do not fall into groups of four, they will not exactly fit the mechanics given on the previous page. However, they will still resemble one of the five, or in some cases, they will combine two of the mechanics.)



Adding Hammers and Pulls

When a lick uses hammer-ons or pull-offs, just skip the down or up stroke for that note, but don't change the rest of the picking pattern. Practice the exercises below until you feel comfortable with the picking.

63


fingering: 2 1 3 1 ⁄ 3

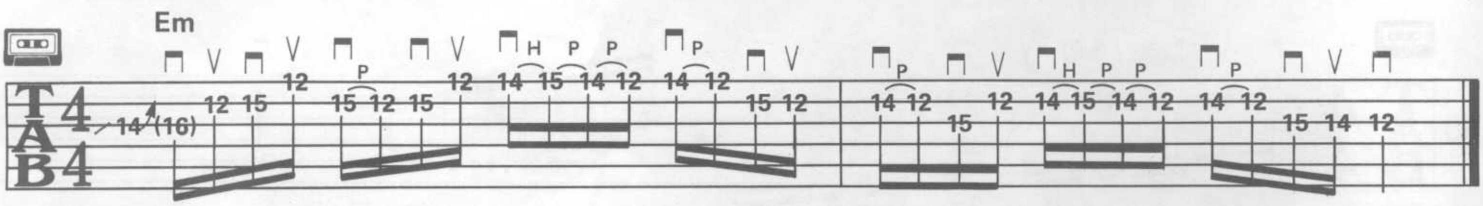
64


fingering: 1 2 1 4 ⁄ 1
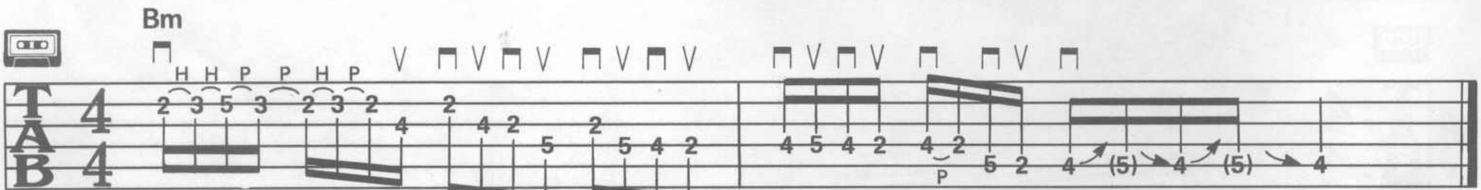
The following licks use hammer-ons and pull-offs in conjunction with alternating picking technique. Exercise 65 is similar to a line played by Randy Rhoads in "*Over the Mountain.*"

65

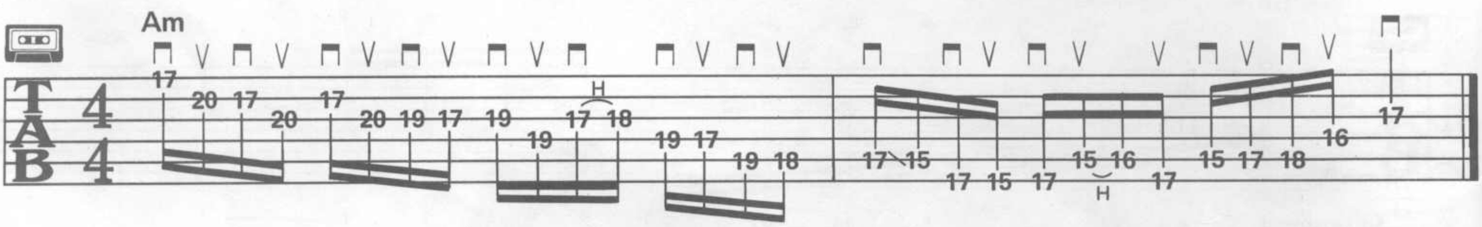

fingering: 3 2 1 4 2 1 4 1 4 2 1 3 1 3 1 4 1 4 3 1 3 1 4 1 4 3

66


fingering: 2 1 3 1 3 1 3 1 2 3 2 1 2 1 3 1 2 1 3 1 2 3 2 1 2 1 3 2 1

67


fingering: 1 2 4 2 1 2 1 3 1 3 1 4 1 4 3 1 3 4 3 1 3 1 4 1 3

68


fingering: 1 3 1 3 1 3 2 1 3 3 1 2 3 1 3 2 1 1 3 1 3 1 2 3 1 3 4 1 2

69

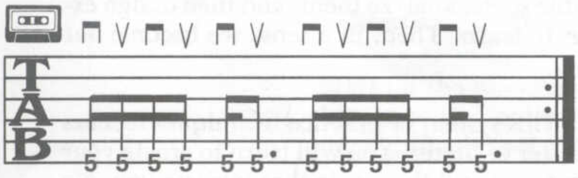

fingering: 3(2) 1 1 4 1 2 1 4 1 3(2) 1 1 4 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1

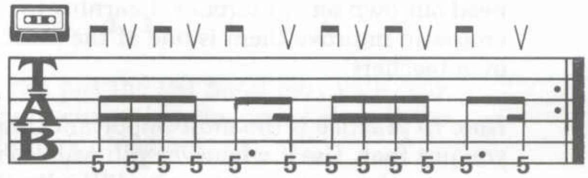
Picking for Rhythm Figures

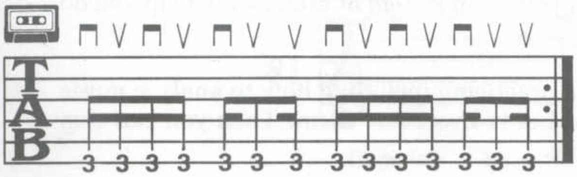
When the rhythm is not even, the sequence of down and up strokes of the pick will likewise change. Listen to each rhythm and practice along with the tape. Make sure your picking is correct.

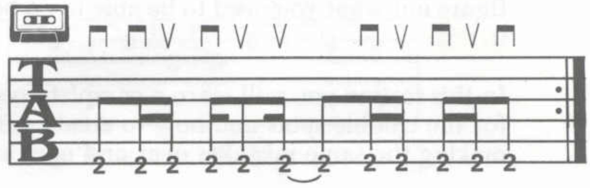
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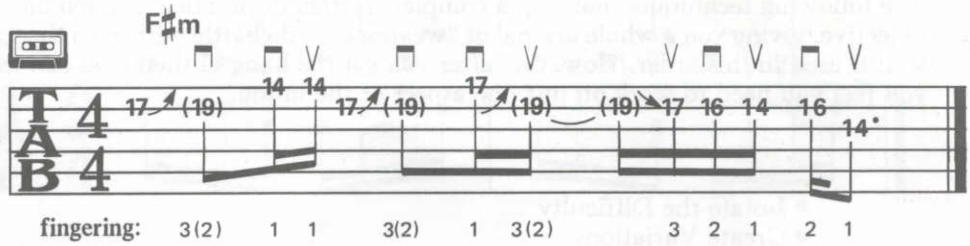

72


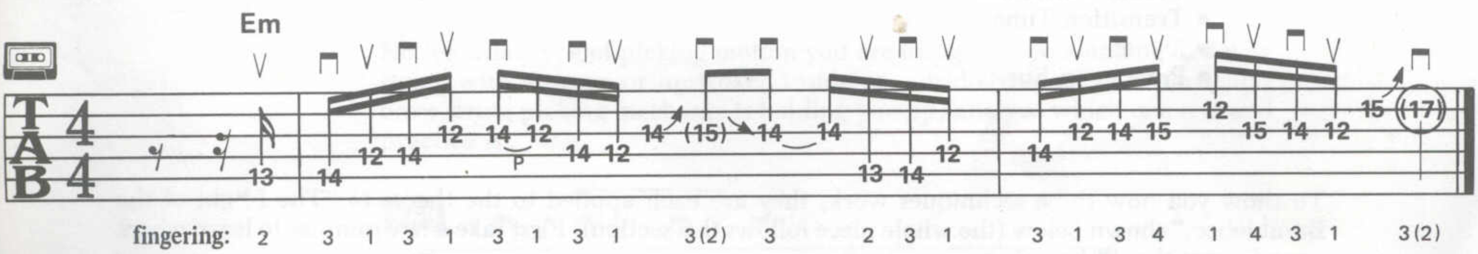
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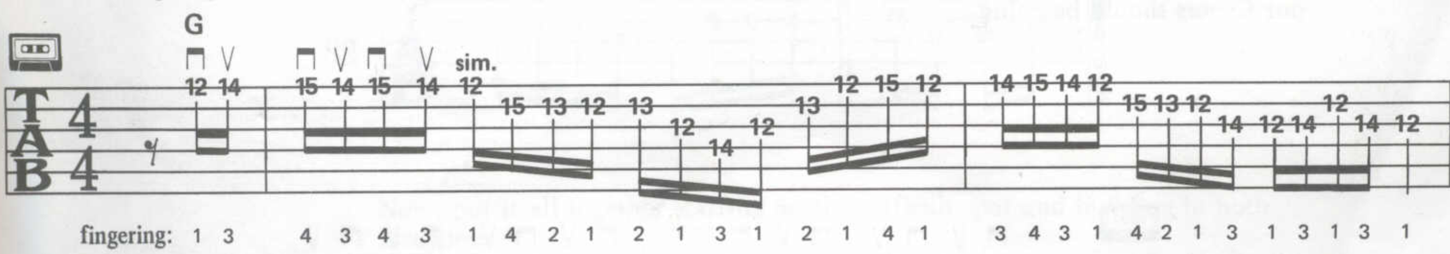
74


75


Notice that the first and third sixteenth notes are always downstrokes, while the second and fourth are upstrokes. When playing the following licks, be aware that when two pickup notes are used, the picking starts with a downstroke, but when either one or three pickup notes are used, the picking starts with an upstroke.

76


77


78


Practice these licks until the picking feels natural. This will help you establish a strong rhythmic foundation. Remember that alternate picking stays consistent only when the notes are all picked and played in an even timing. When hammer-ons, pull-offs, or broken rhythms are introduced, the alternating pattern will be interrupted.

The Art of Practicing

ABOUT EXERCISES...

In the last section you learned and practiced a series of exercises to help you develop the best possible foundation for guitar technique. This is the first stage. You understand the basic skills that you should be capable of, and how to achieve them. However, at some point you will need to leave most of these exercises behind.

No two people are exactly alike. Each of us has our own strengths and weaknesses. Also, we each have our own musical tastes. Therefore we will learn different phrases, and when we create our own music each of us will play differently. It should be obvious that if we each play different things, we will each need our own set of exercises. Learning to find our own trouble spots, analyze them, and then design exercises to improve them is one of the most important things to learn. Then, in a sense we become our own teachers.

How to practice is the most important thing you can learn. This system of practice techniques teaches you just that. Use it whenever you want to play something faster or better. You will learn to create your own exercises to iron out every difficulty that stands between you and the music that inspires you. No two guitarists who finish this book should be practicing exactly the same exercises. Make it your goal to figure out what you need to be able to do better, and design your own system of exercises to help you do it.

In this section you will learn a complete system for effective practicing including how to analyze music for the trouble spots and how to create variations and exercises to overcome them. Then you can stop making the same mistakes over and over and really improve.

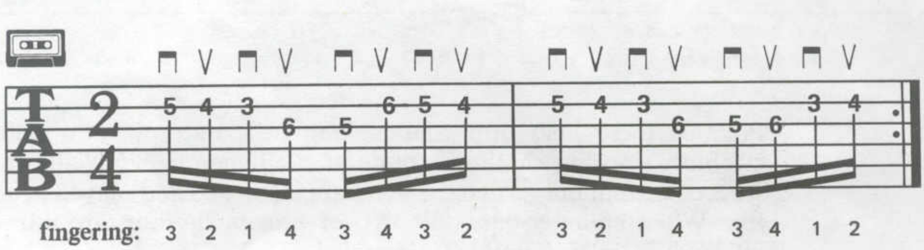
PRACTICE TECHNIQUES

The following techniques make up a complete system of practicing. Each one accomplishes a different objective, giving you a whole arsenal of "weapons" to do battle with even the toughest parts. They work well if used in this order. However, after you get the hang of them you can use them separately when you feel you need to work on just one aspect of the music.

- Isolate the Difficulty
- Create Variations
- Transition Time
- Dynamics
- Practice in Bursts

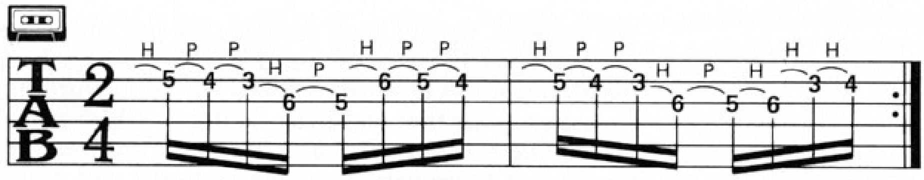
To show you how these techniques work, they are each applied to the theme to "The Flight of the Bumblebee," shown below (the whole piece follows this section). First take a few minutes to learn where your fingers should be going.

79



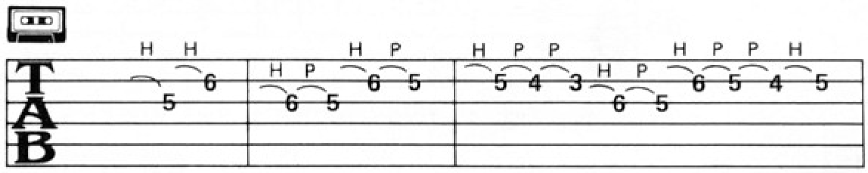
Isolate the Difficulty

Isolating the difficulty means not only finding the part of the music or lick that is most difficult, but also discovering *why* it is difficult. Go to the spot you need to improve and "separate the hands." Both your left and right hands must each be capable of doing their part without the help of the other hand. (One hand can help to "pull" the other hand through a difficult part.)

80


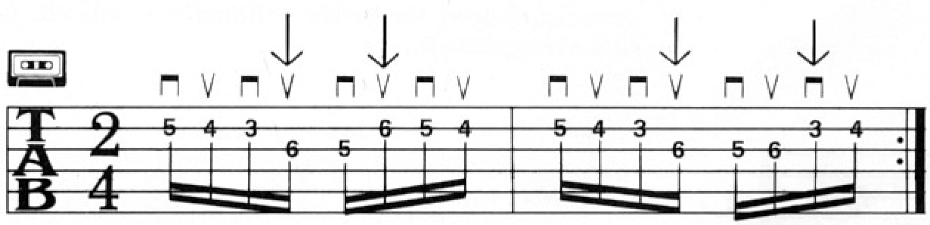
fingering: 3 2 1 4 3 4 3 2 3 2 1 4 3 4 1 2

Start on the offending notes and practice just the left hand part with only hammers and pulls. (For this example, assume that the part below is the most difficult spot.) Then add notes in both directions.

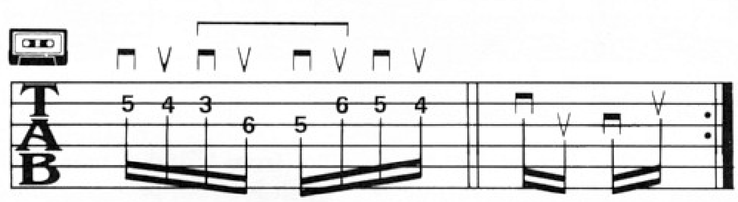
81


fingering: 3 4 4 3 4 3 3 2 1 4 3 4 3 2 3
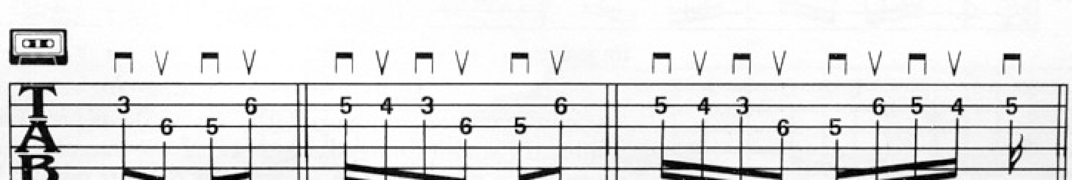
Then look at the right hand picking. First, you have to make sure that you are doing the right picking motions consistently. Locate a few key notes and determine if they will be downstrokes or upstrokes. As you play slowly, watch yourself especially on these notes to make sure your picking is correct. (Also, it might help to exaggerate the size of the picking motion to insure that you are alternating consistently.)

82


Notice what type of picking motion you are using. Are you leading to a new string with a down or upstroke? Inside or outside picking? If a particular cross-string picking mechanic is holding you up, analyze which one it is and practice it.

83


Now, put it all together starting on the difficult spot and building in both directions.

84

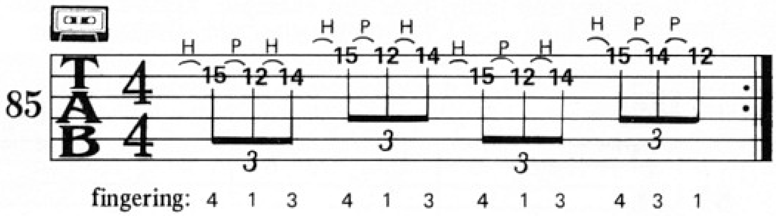

fingering: 1 4 3 4 3 2 1 4 3 4 3 2 1 4 3 4 3 2 3

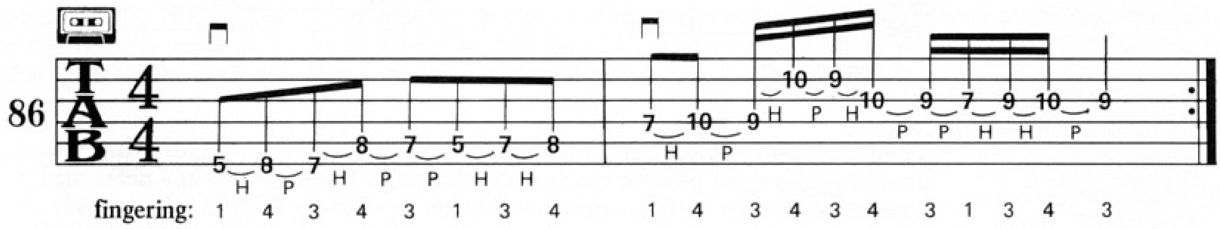
Create Variations

On the previous page, you have analyzed what the difficult left and right hand motions are. Now, put this knowledge to use by creating variations that share or even exaggerate the difficulty. Create your own exercises to work on your specific problems. Then you can practice the same technique repeatedly, but you will be playing different musical passages. With a little creativity you can practice one technique for hours, and really nail it.

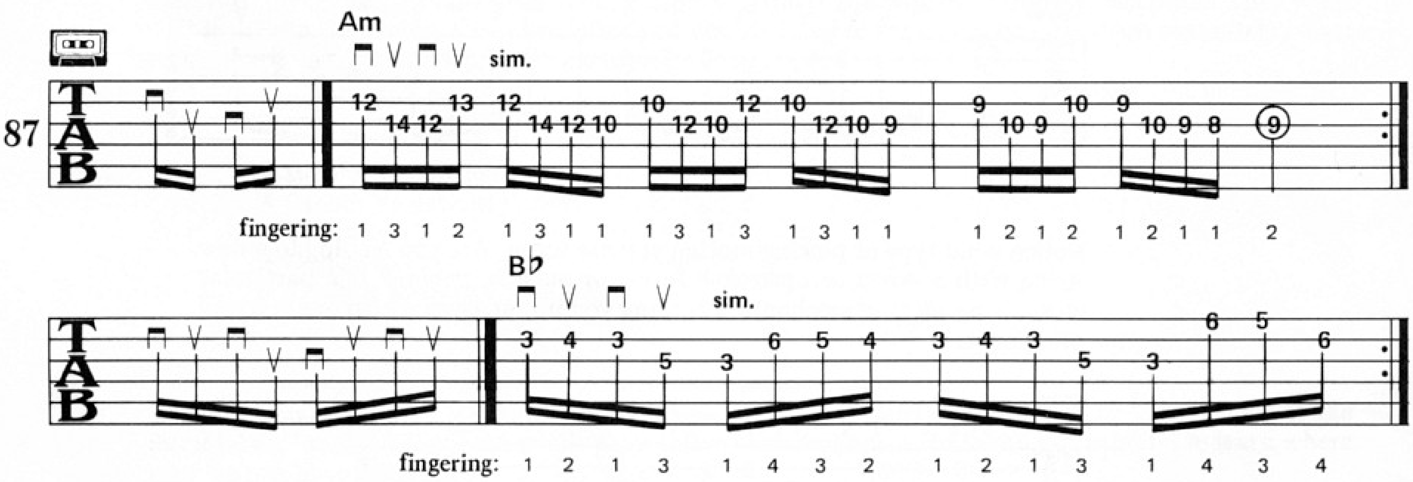
For example, the left hand problems we saw earlier were caused by a lack of independence between the third and fourth fingers: specifically, lifting the fourth finger to a new string directly after the third finger has fretted a note. Create exercises that make you do this or which make you do an even more difficult version of it. (Put an extra string between those two difficult notes, or repeat it twice before moving on to the next notes.) Then, get out your metronome and get to work!

Some exercises to work on this particular left hand problem might include:

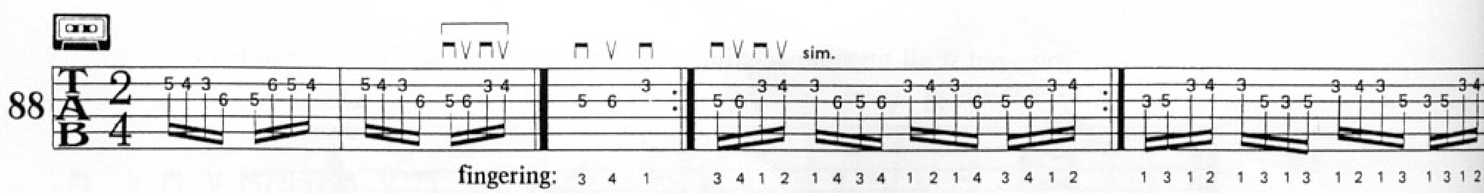




The right hand problem was the cross-string picking motions leading with upstrokes to each new string. Analyze the picking motions and create exercises that share the same picking motions, but use different left hand note patterns. Below, the picking difficulty is isolated, followed by variations that incorporate it.



The last beat of the segment from "Flight" uses a downstroke to lead to a higher string. If this is difficult for you, here are a few exercises to help out.

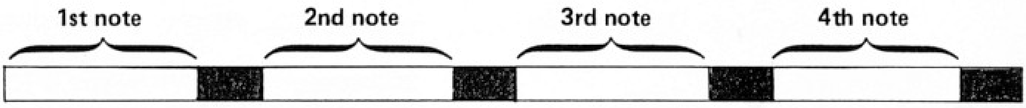


See what you can come up with. Try to be as creative as possible musically while still maintaining the essence of the exercise. You can come up with some really great stuff to use as licks of your own!

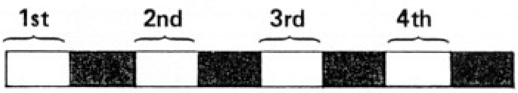
Transition Time

The "transition time between notes" refers to the synchronization of your left and right hands, that is, how well they work *together*. The better your synchronization is, the faster you can play smoothly and articulately.

If you took high speed photography of yourself playing something fast and viewed it very slowly, you would find that for each note, either your pick hit first followed closely by your finger or vice versa. The diagram below represents four notes being played. The open area represents the actual sounding time of the note, while the shaded area shows the amount of "transition time" between notes (that is, any "noise," or lack of clear ringing of the note).



When you play faster, the notes are shorter, but the transition time stays about the same. The result is that is sounds choppier.

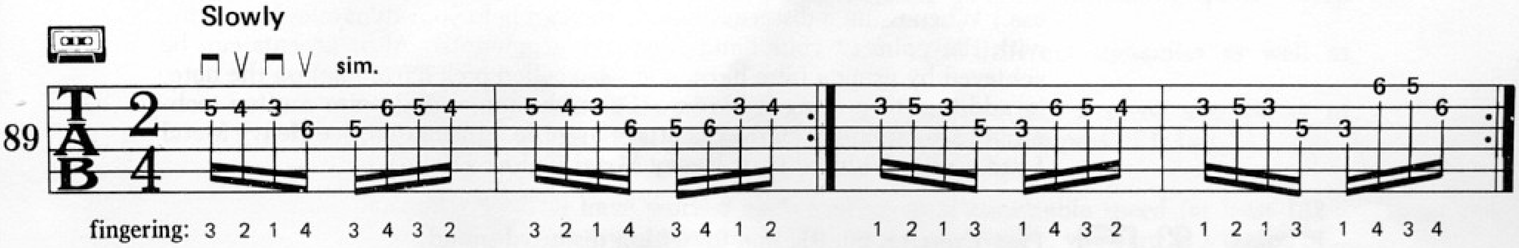


To play fast and articulately, you need to speed up the transition time, not just the notes.



Play the notes slowly, but as you play each note, it should be done quickly. That is, let the notes ring out, but when it's time to play the next note, do it as quickly and sharply as you can, with snap! The notes will flow together, very connected. Don't play too fast. The faster you play, the more you must concentrate on where your fingers are going, instead of on getting as much of the ringing of the notes as possible and eliminating the noise. Think quality, not quantity. Your notes will sound more intelligable and more articulate. You will have better synchronization which, in turn, will allow you to play faster!

Make it a habit to practice like this whenever you are playing something slowly.



Dynamics

Learning to control your dynamics by picking from very soft to as hard as possible, will give you much more control over the guitar.

Volume dynamics are indicated as follows:

pp—very soft (*pianissimo*)
p—soft (*piano*)
mp—moderately soft (*mezzo piano*)
mf—moderately loud (*mezzo forte*)
f—loud (*forte*)
ff—very loud (*fortissimo*)
sfp—very loud, followed by soft (*sforzando piano*)

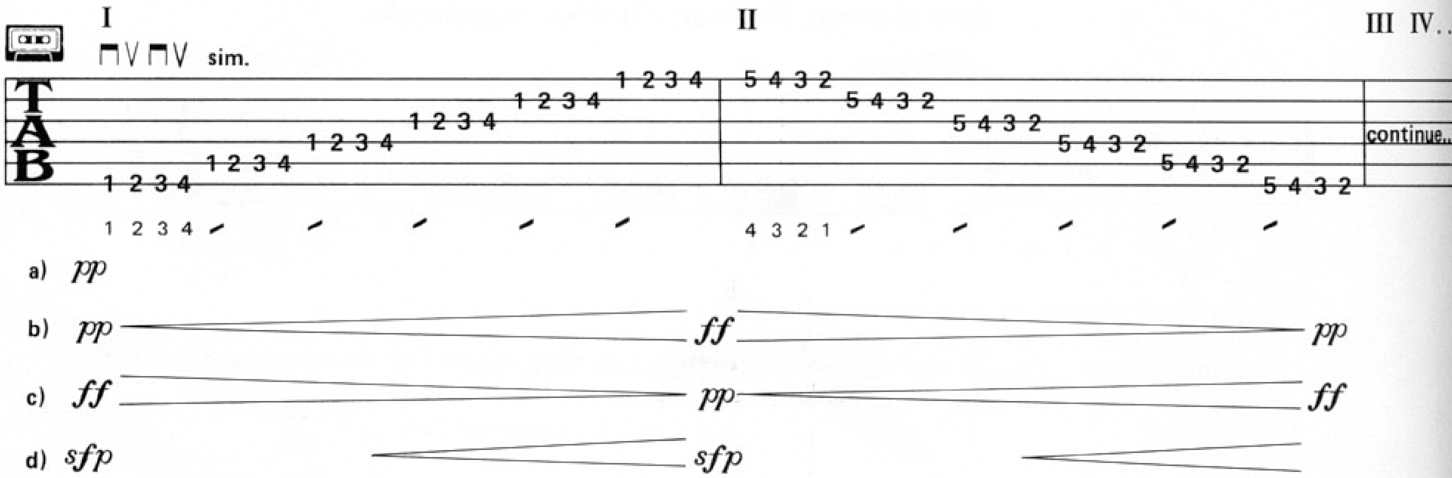
You should also learn these important dynamic symbols:

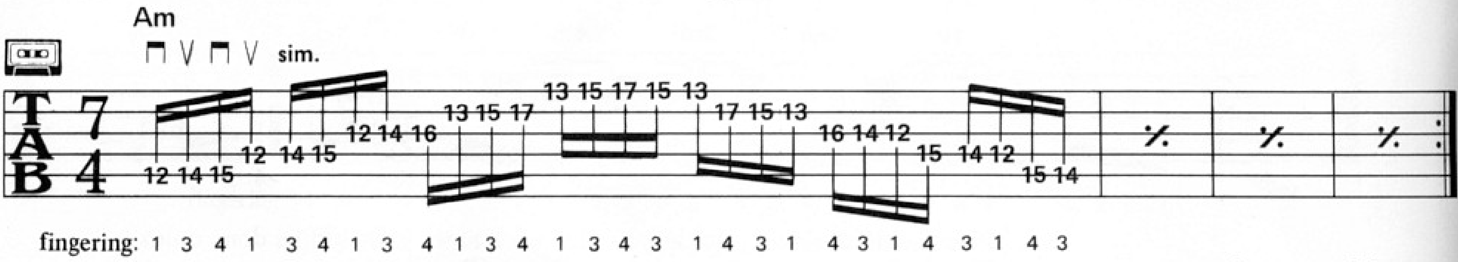
< crescendo — gradually getting louder

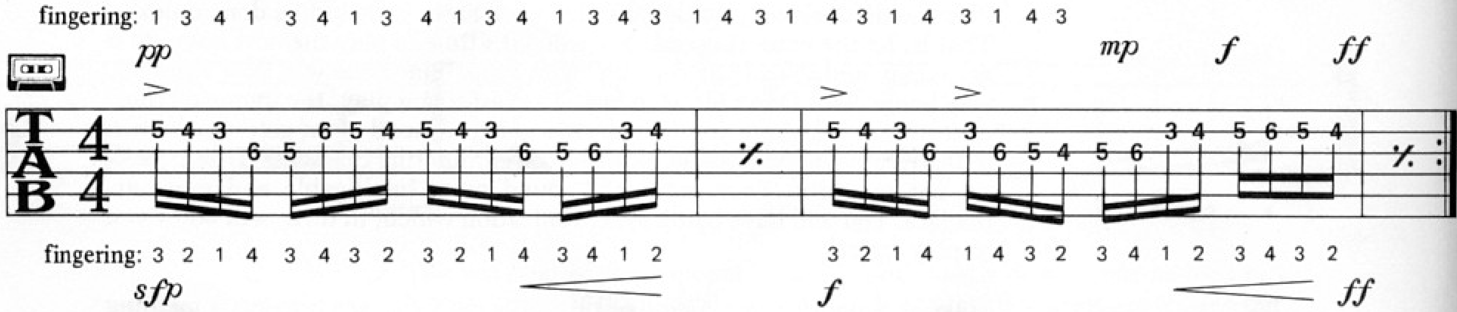
> diminuendo — gradually getting quieter

> accent — play this note louder than surrounding notes

Set your amp for a clean sound to practice the following exercises.

90


91


92


Now, turn on the distortion and play these same exercises. Although the distortion compresses the sound and largely eliminates volume dynamics, the volume and tone *will* change somewhat as you play louder or quieter. (How much they change depends on your tone and the amount of overdrive you use.) When using a distorted sound, you can help your dynamics by muting with the palm of your hand (in varying amounts). Also, accents can be achieved by using a false harmonic (also called pick harmonic) on the note, in addition to picking it harder. (False harmonics and palm muting techniques are explained on the cassette. For more information, see **Heavy Metal Lead Guitar Volume 1**, or **Heavy Metal Guitar Tricks**.)

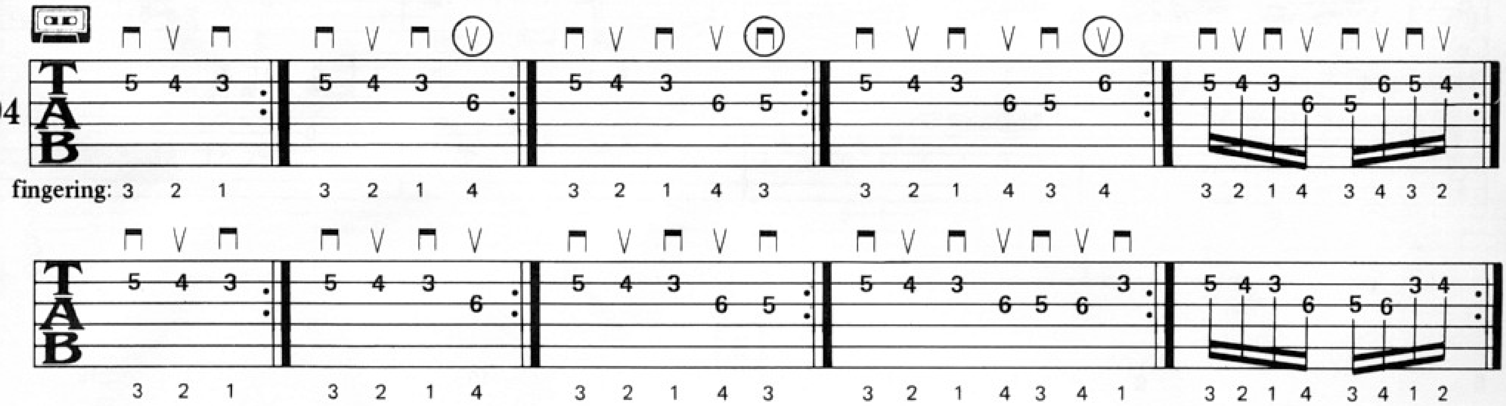
93 **Play Exercises 90, 91, and 92 with a distorted sound.**

Practice in Bursts

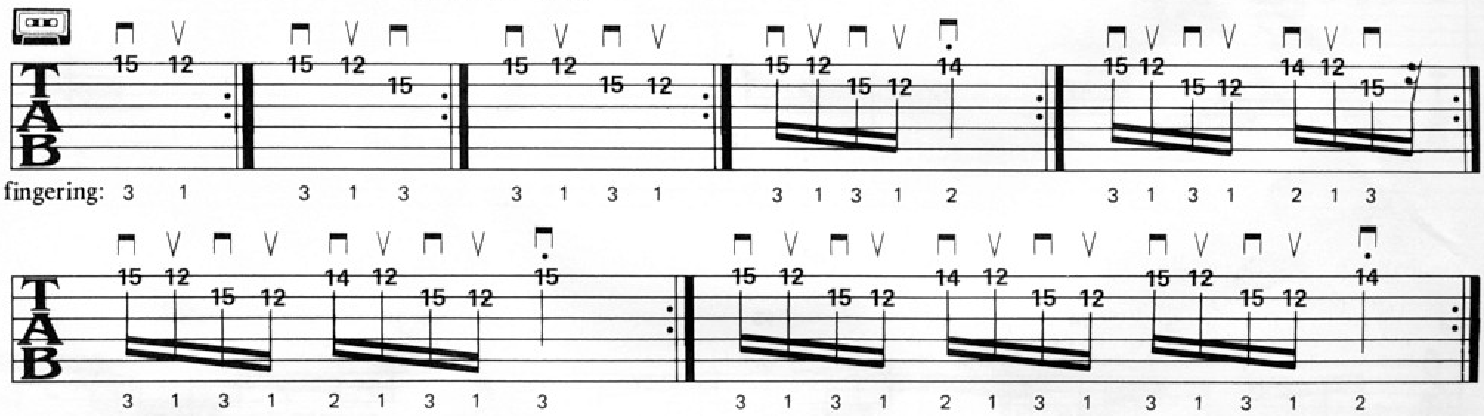
I've saved the best for last. This technique is one of my favorites. The main purpose of practicing in "bursts" is to get *fast*! Really fast. I've saved if for last because it will only work well if you have spent enough time laying the foundation by playing slowly and steadily (which is accomplished by the previous practice techniques).

The concept here is to practice in short, repeating "bursts" of notes. With this technique, rather than playing a long line of notes at a comfortable speed and increasing your speed gradually, you begin with a very short sequence, playing as fast as you can, and add one note at a time. By giving yourself a moment of rest between each effort, your mind can "regroup" and prepare for the next set of notes. Push yourself to play fast, but not so fast that you begin making mistakes.

First, this technique is applied to the theme from "Flight." Here's how it works:

94


Now, try it on a few other picking mechanic exercises and see if you can push up your speed.

95


Now you are armed with everything you need to work out any alternating picking line you can imagine (and maybe even some that you can't imagine!) On the following pages is just the thing to test yourself. The classical piece "Flight of the Bumblebee" uses some very difficult right and left hand patterns. Use all of the practice techniques covered. (You'll need 'em — this ain't easy!)

Learn a short section at a time, memorize it, and play through it slowly (70 to 90 BPM). Then use the practice techniques:

- **Isolate the difficulty**—separate the hands, then build in both directions.
- **Create variations** and exercises that share or even exaggerate the difficulty.
- **Work on Transition Time** by playing slowly but making quick, sharp movements.
- **Work on Dynamics** — Improvise with different dynamics as well as the ones indicated.
- **Practice in Bursts** — Expand each measure into a speed exercise — to play a piece fast you have to be able to play each part of it fast.
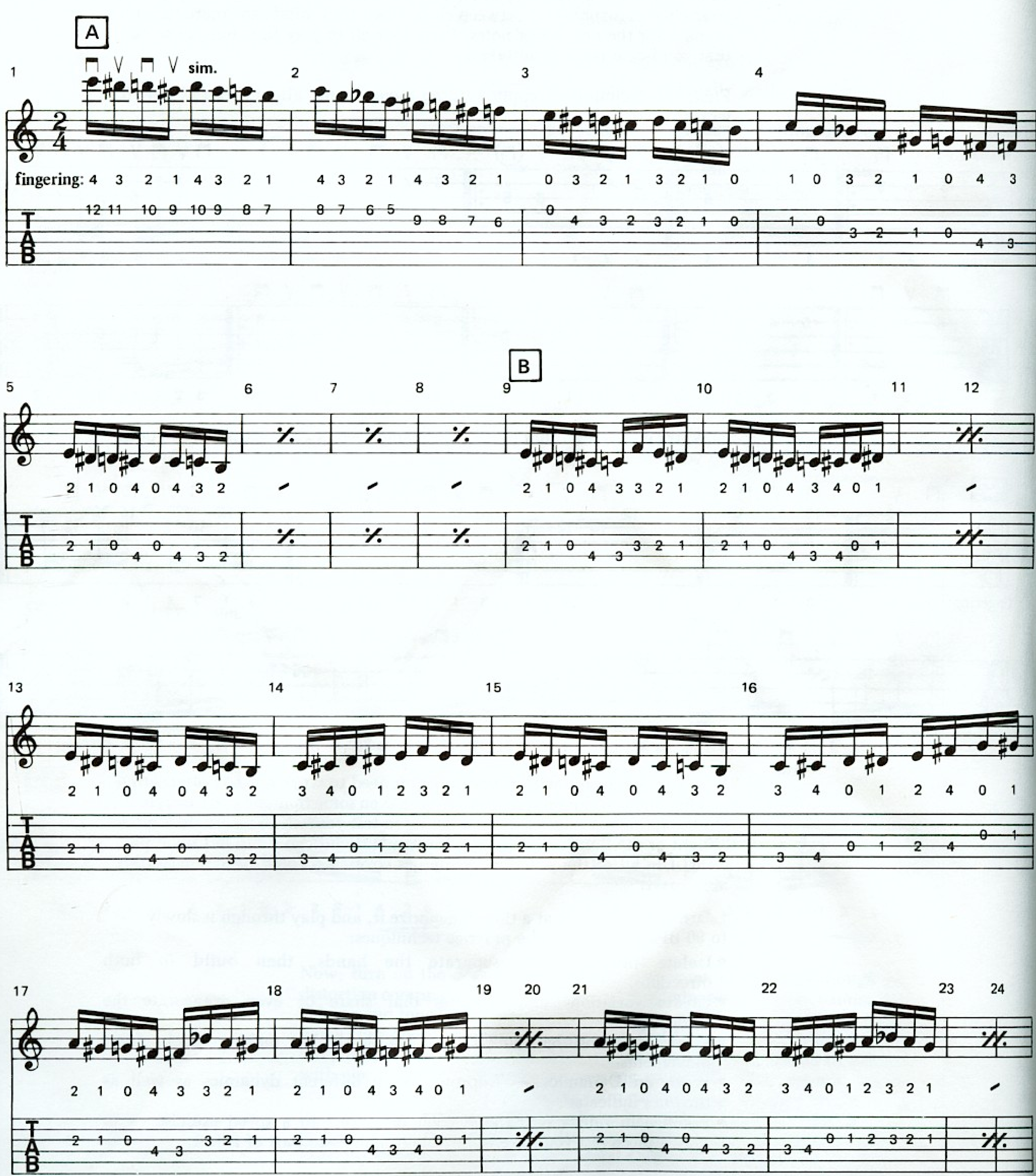
When you have worked each part up to a reasonable speed (at least 132 BPM), then try putting them back together. Ideally, work up to a tempo of about 160 + .
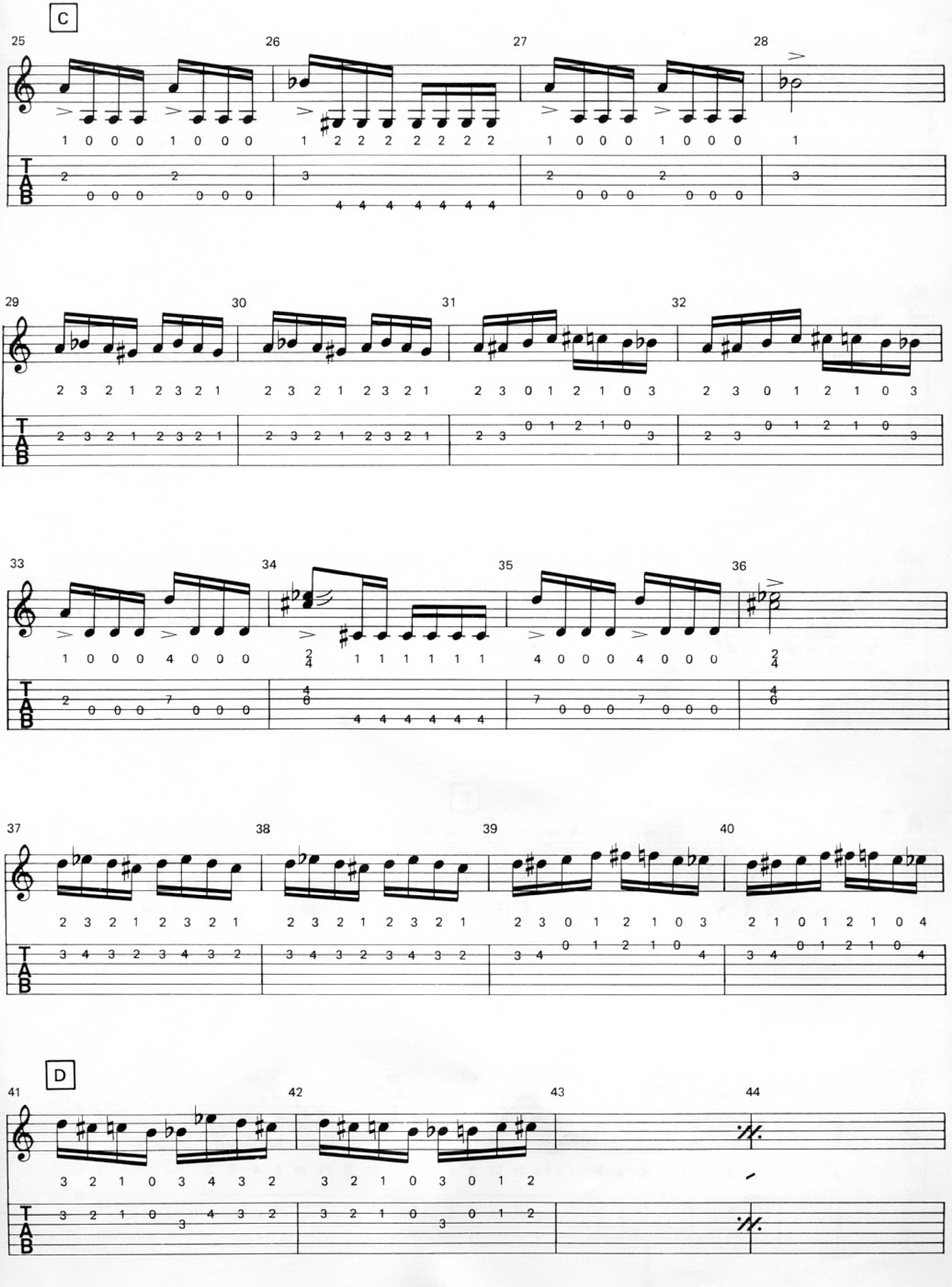
The Flight of the Bumblebee
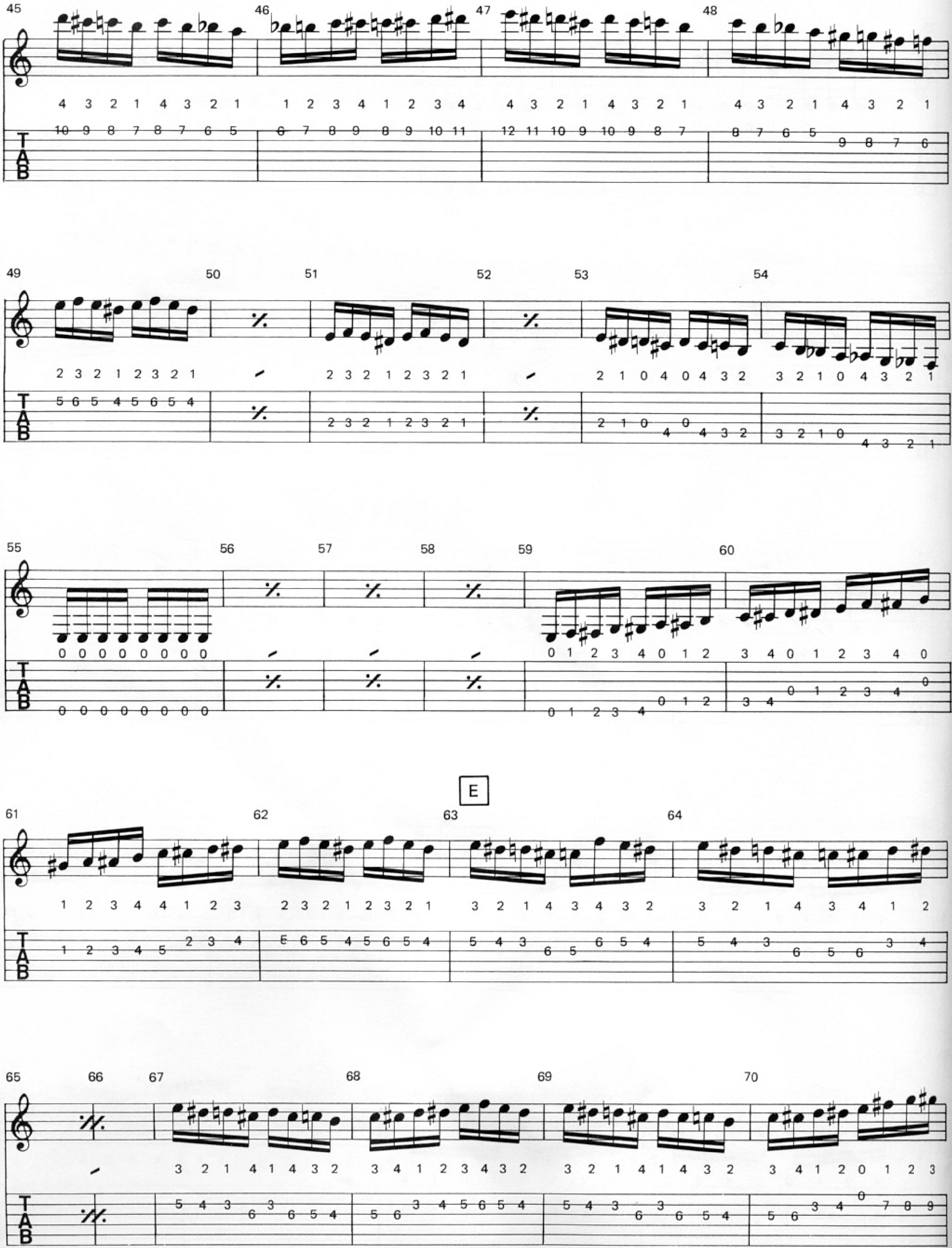
Nicolai Rimsky-Korsakov (1844—1908)

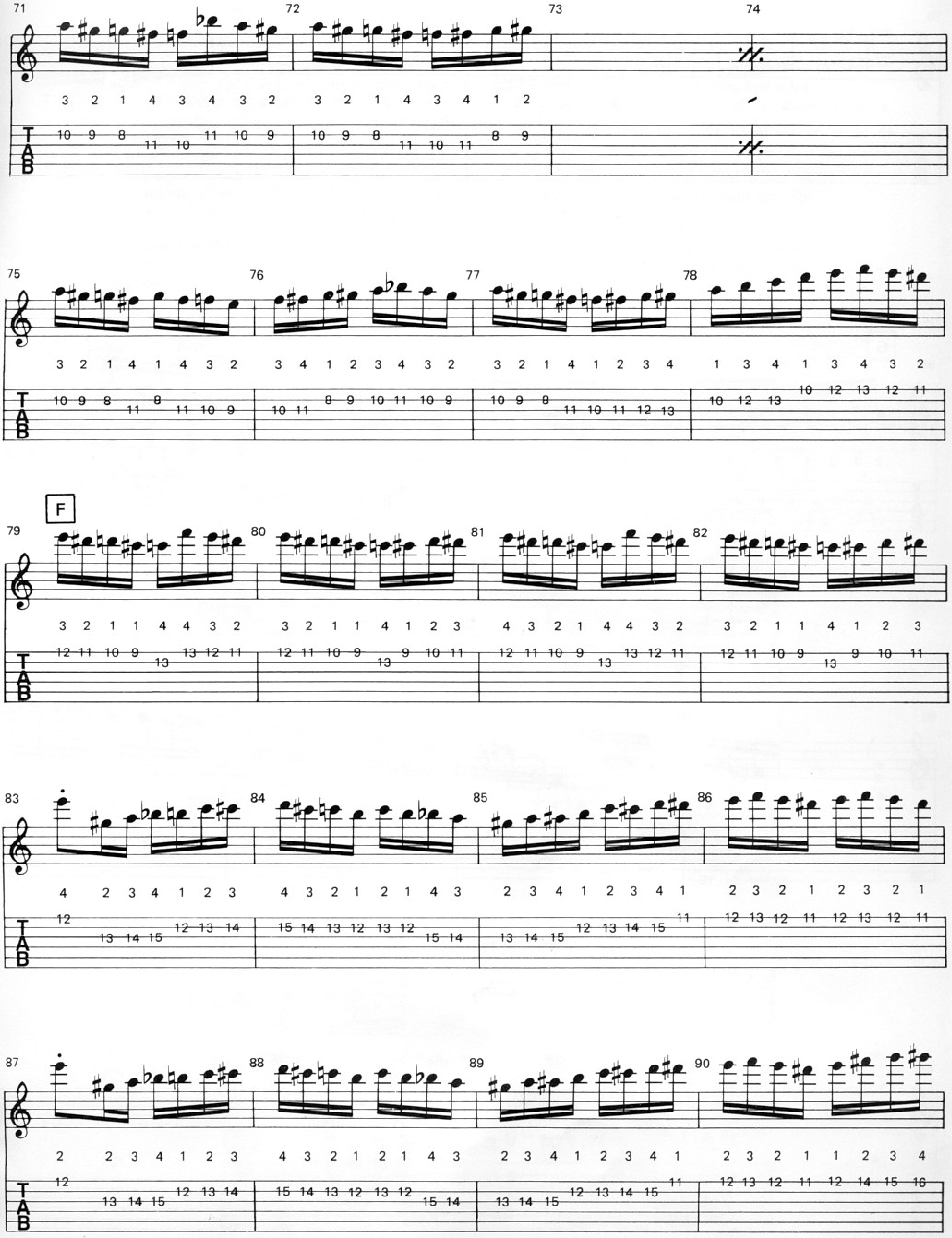
Edited and Transcribed for electric guitar by Troy Stetina
Rock accompaniment by Troy Stetina, ©1988

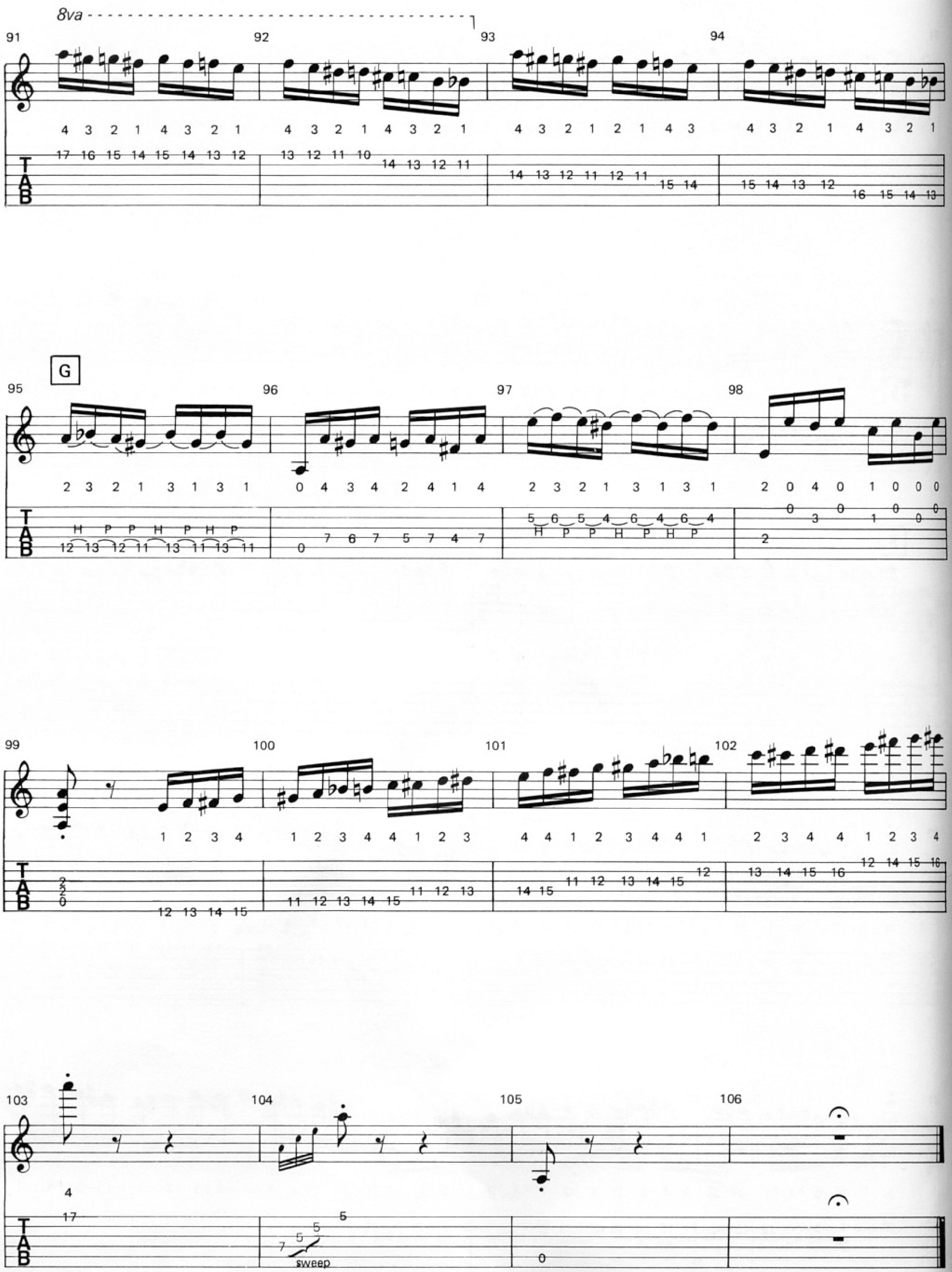
96




C
D


E
TAB


F


8va
G
sweep

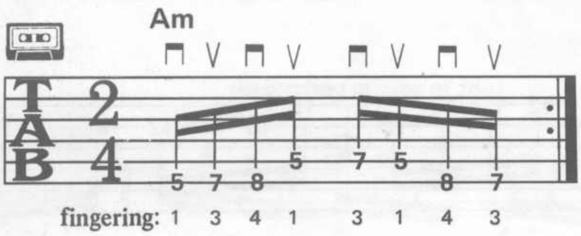
Building Speed

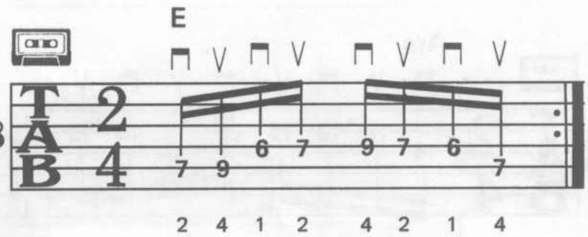
CYCLIC PATTERNS
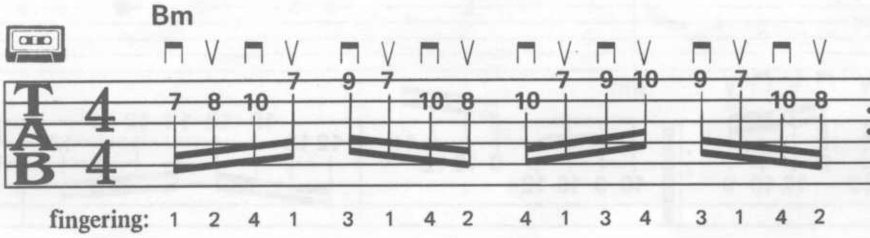
Speed adds intensity and this is, of course, why rock and heavy metal players, in general, play fast solos. However, don't forget that that speed is made up of *notes*, and that you should never sacrifice those notes for a lot of fast noise. Each note is part of what you are building and if you lose the building blocks, you've just built a lot of nothing.

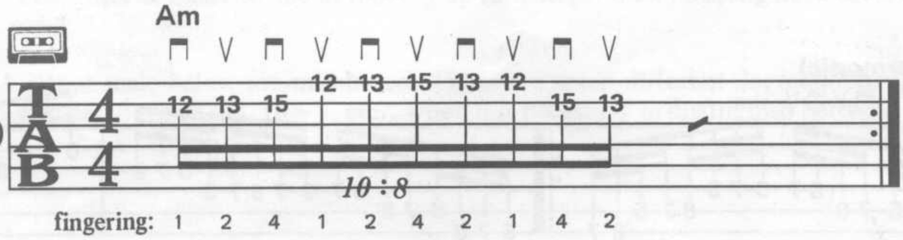
So as you are practicing these short repeating scale fragments, remember that speed is just a fast sequence of musical notes and that the notes have to be there first. Using the metronome, set your amp for a clean sound and apply the practice techniques to each one of these cyclic patterns.
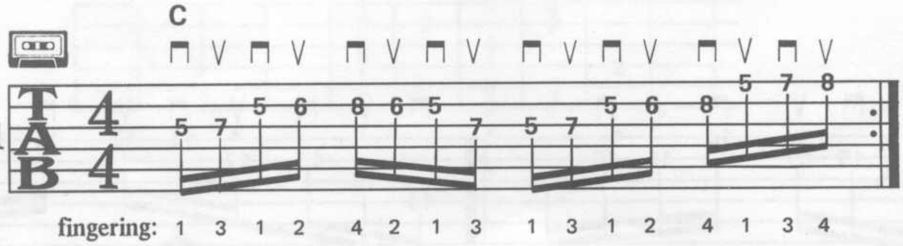
Then, crank up the distortion, speed up the metronome and see just how fast you can get some of these! On the cassette, each exercise is played at three speeds: Slow (around 80 BPM), moderately fast (around 120), and really moving (160 +).
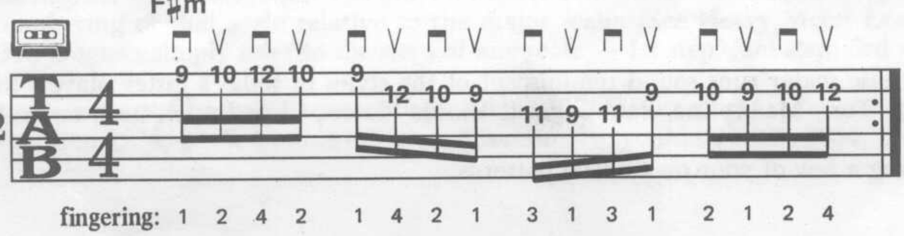
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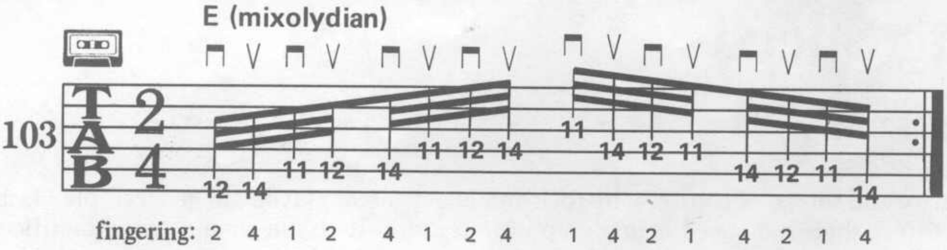
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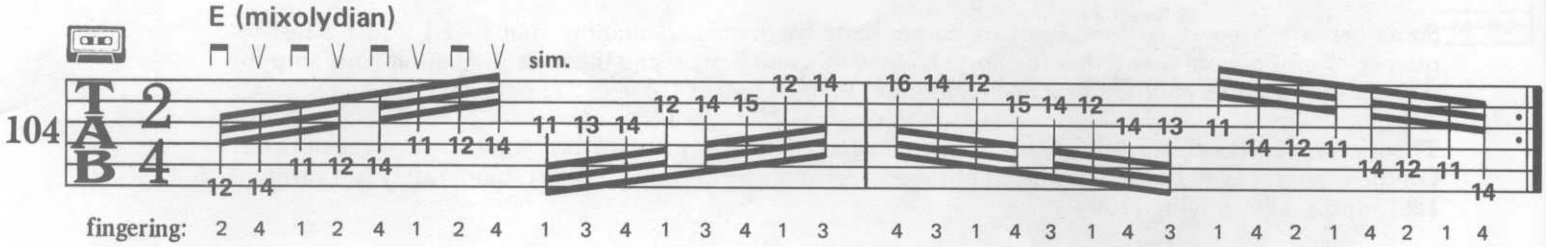
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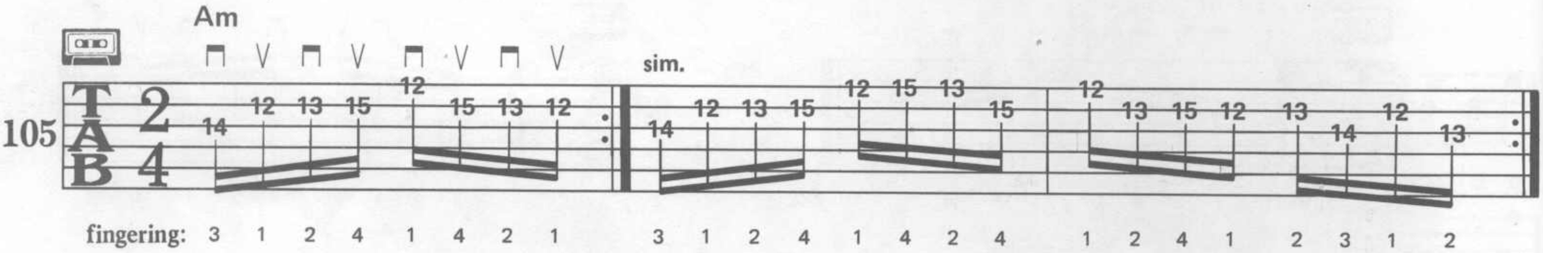

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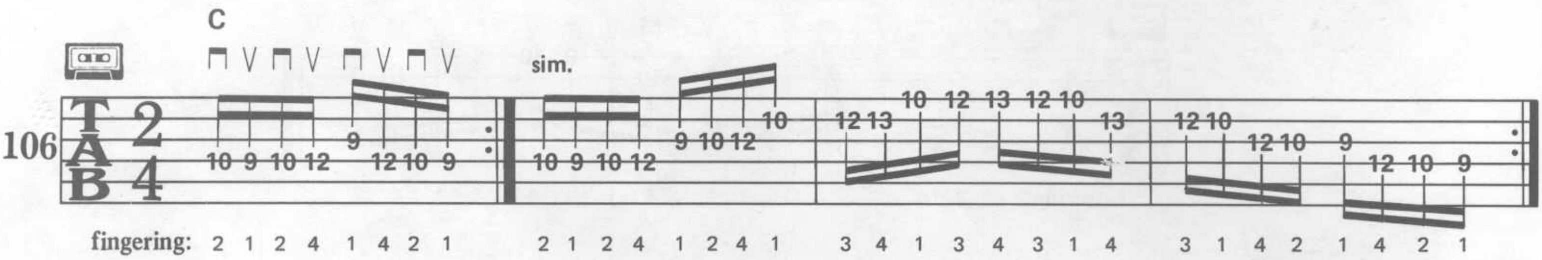
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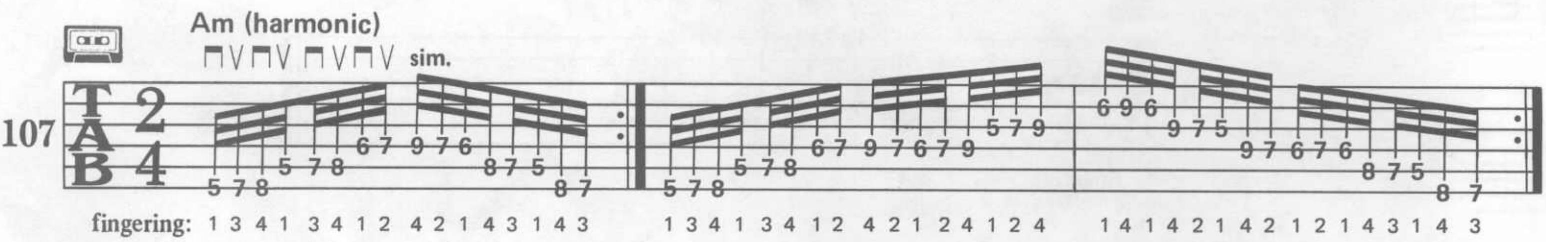

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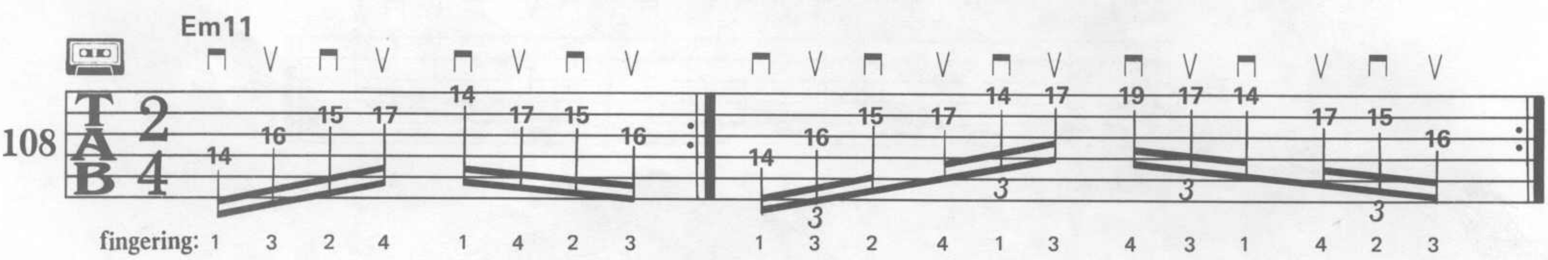











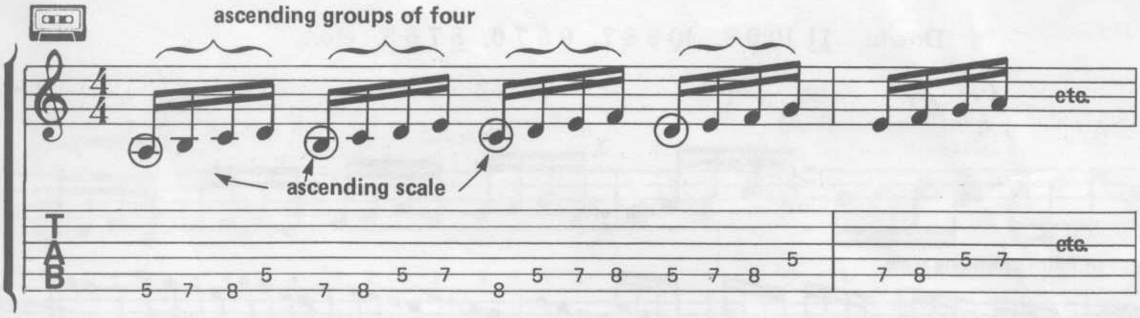


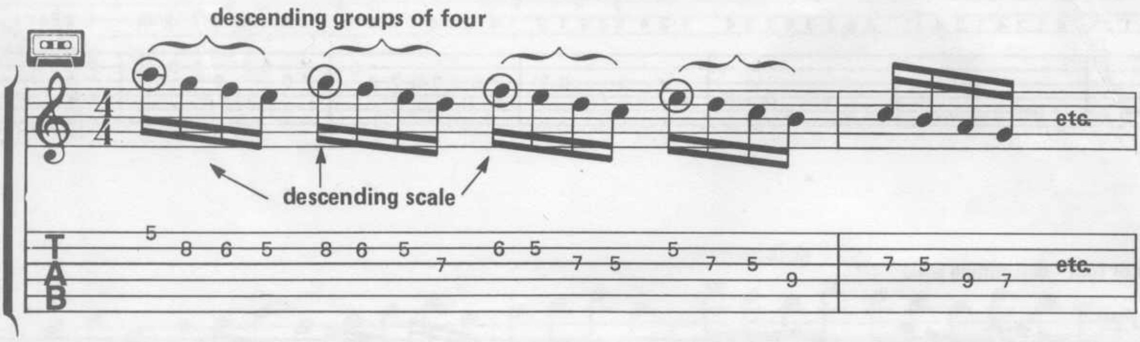
Many of these scalar runs sound reminiscent of the styles of today's faster players including Yngwie Malmsteen, Tony MacApline, Paul Gilbert, Vinnie Moore, Chris Impellitteri, and others.

Try building a few of your own cyclic patterns.

SEQUENCE PATTERNS

A "sequence" is a series of melodic ideas that repeats identically, except that it may begin at higher or lower pitches. Exercise 109 below shows a sequence of four ascending notes. Notice that the first note of each group moves up the scale one step at a time. Exercise 110 shows a descending sequence coming down the scale.

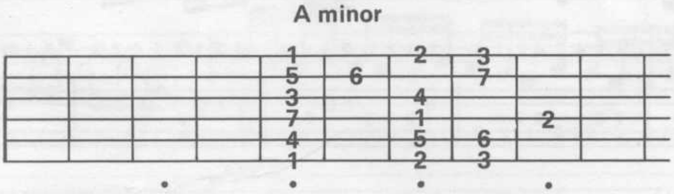
109


110


The notes of the scale are numbered and are called *degrees*. If you liken the degrees of a scale to steps on a ladder, then you can think of Exercise 109 as moving up four steps, then jumping back three, up four, jump back three, etc..

The notes of the A minor scale below are numbered. There are seven different degrees. Then the scale repeats one octave higher, (8 = 1, 9 = 2, 10 = 3, etc., when it is necessary to distinguish between octaves.)

A minor



Don't confuse scale *degrees* with scale *tones*. The tones for the A minor scale are 1, 2, ♭3, 4, 5, ♭6, and ♭7, and reflect the numbering of that scale relative to the major scale. (See **Heavy Metal Lead Guitar Volume I,** page 34.) Degrees simply refer to the steps of any scale — 1st step, 2nd step, 3rd step, etc..

Using degrees, any sequence can be written out and applied to any scale or arpeggio. For example, Exercise 109 could be written 1234, 2345, 3456, 4567, etc.. Exercise 110 would be 8765, 7654, 6543, 5432, etc..

An ascending group of notes can be played through a descending scale and vise versa. Exercise 111 uses the *ascending* group of four to go up the Am scale and back down, then the *descending* group of four is used both up and back down the scale.

Up: <u>1</u> 2 3 4, <u>2</u> 3 4 5, <u>3</u> 4 5 6, etc...

Down: <u>8</u> 9 10 11, <u>7</u> 8 9 10, <u>6</u> 7 8 9, etc...

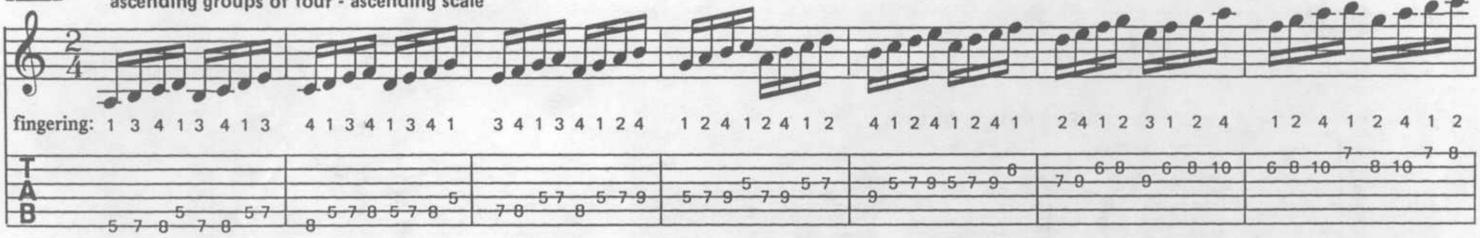
Up: <u>4</u> 3 2 1, <u>5</u> 4 3 2, <u>6</u> 5 4 3, etc...

Down: <u>11</u> 10 9 8, <u>10</u> 9 8 7, <u>9</u> 8 7 6, <u>8</u> 7 6 5, etc...

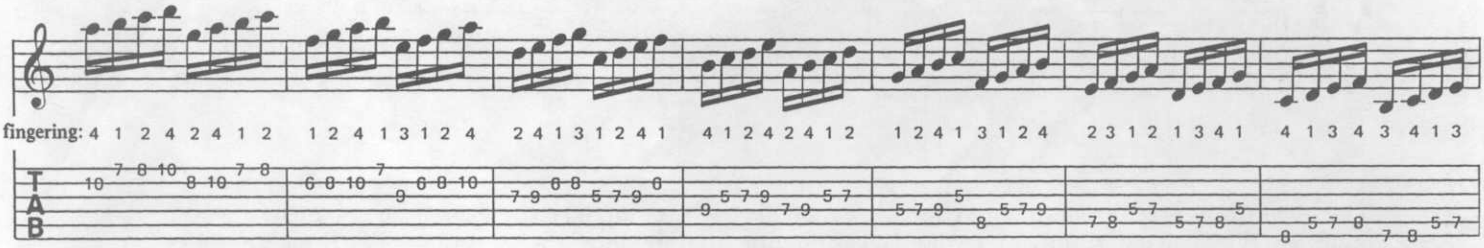
Am

ascending groups of four - ascending scale
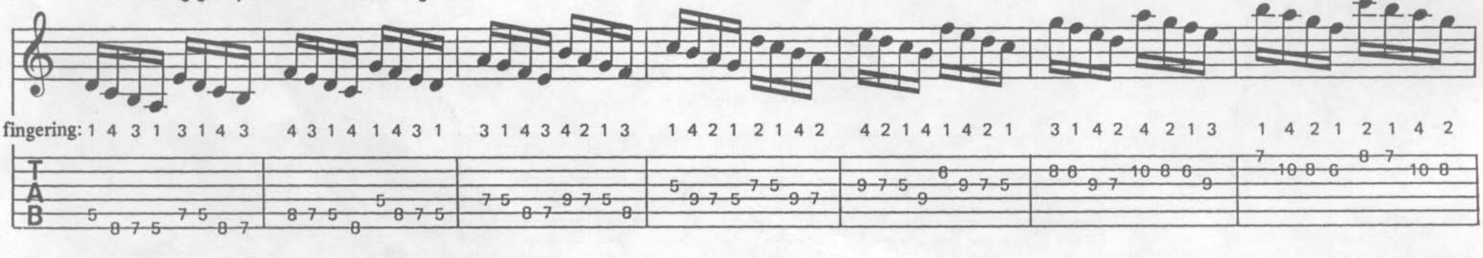
111



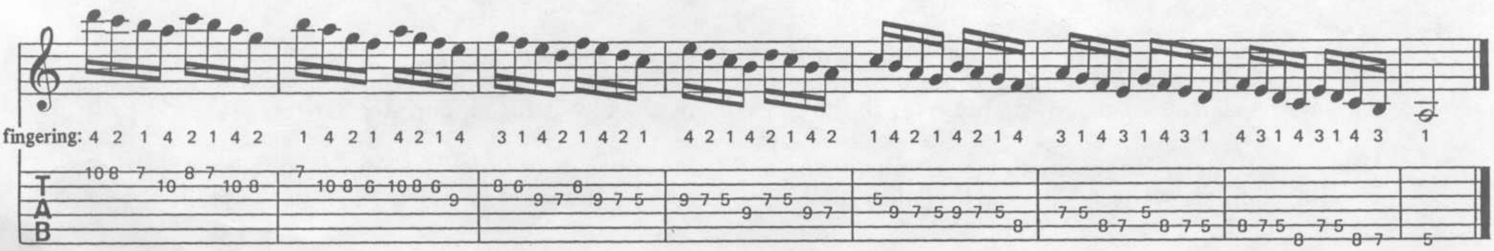
ascending groups of four - descending scale



descending groups of four - ascending scale



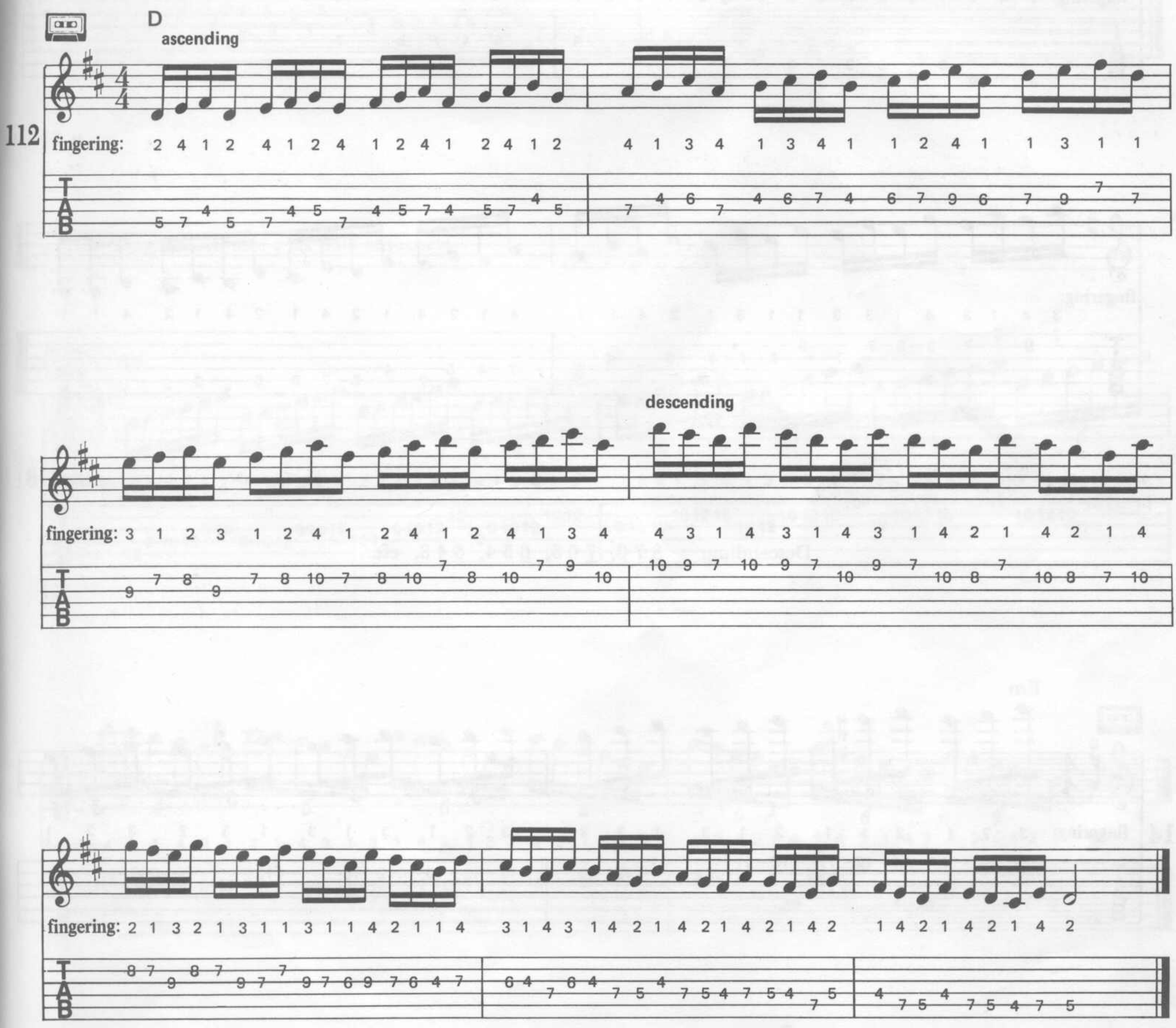
descending groups of four - descending scale



The next three exercises use different sequences. The sequence in terms of degrees is written out above each exercise.

Up: 1 2 3 1, 2 3 4 2, 3 4 5 3, 4 5 6 4, etc...
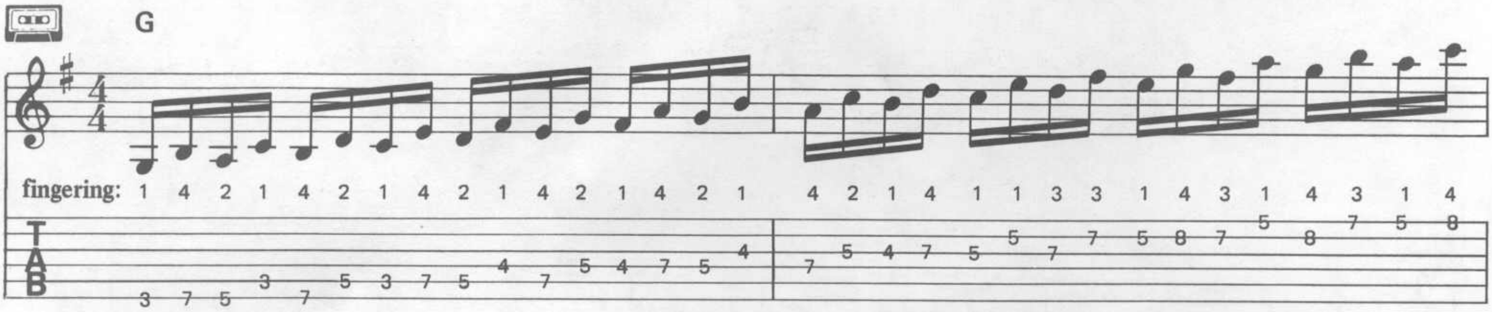
Down: 8 7 6 8, 7 6 5 7, 6 5 4 6, 5 4 3 5, etc...
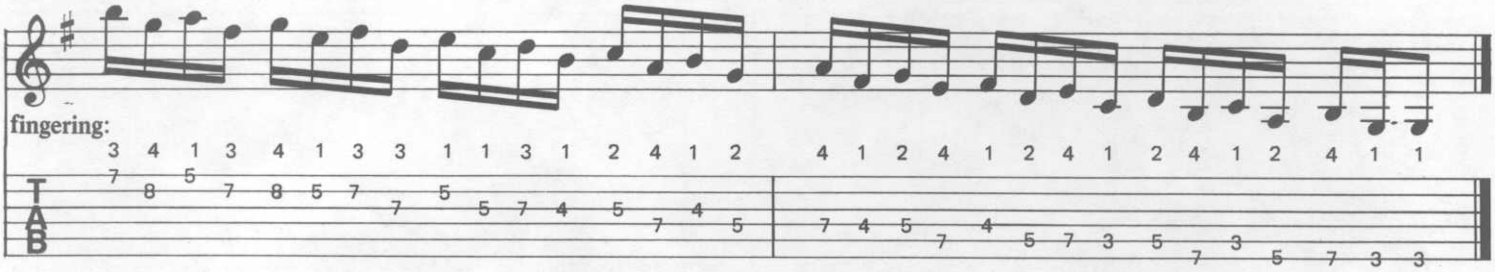


Ascending: 1 3, 2 4, 3 5, 4 6, 5 7, etc...

Descending: 8 6, 7 5, 6 4, 5 3, 4 2, etc...

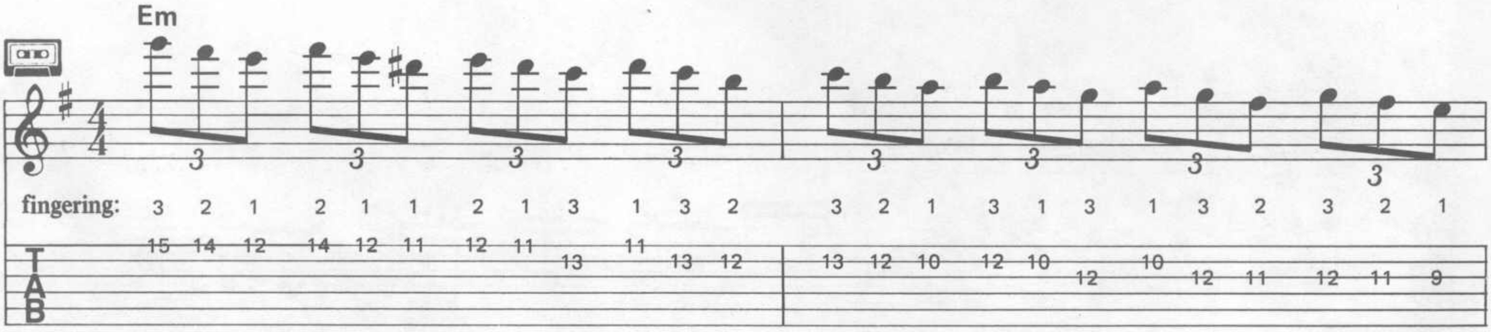
113
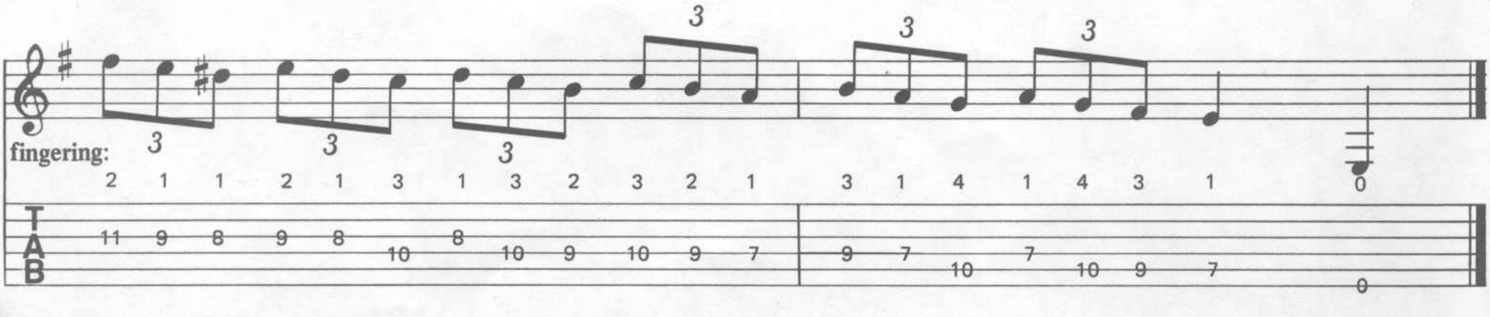




Descending: 8 7 6, 7 6 5, 6 5 4, 5 4 3, etc...
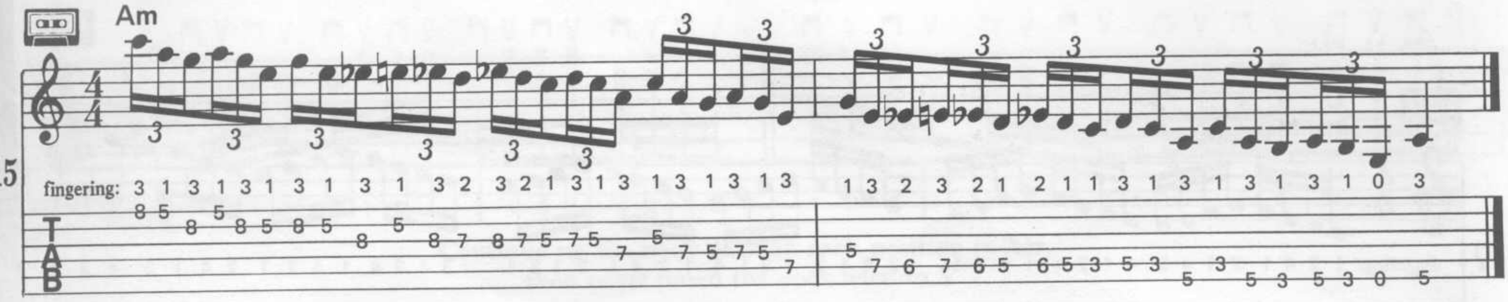
114





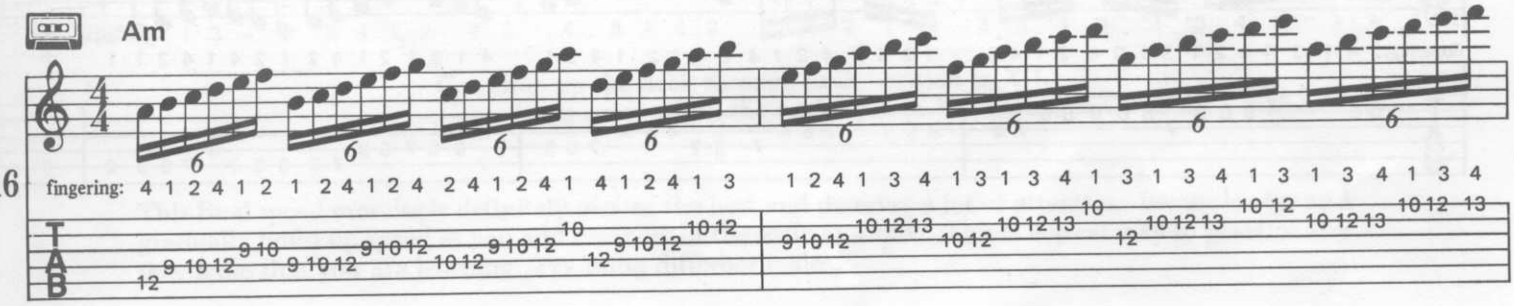
Exercise 115 applies a descending triplet sequence to the "blues" scale in A. (The "blues" scale, a minor pentatonic scale with the addition of the ♭5th tone. See **Heavy Metal Lead Guitar, Volume I**, page 23.)
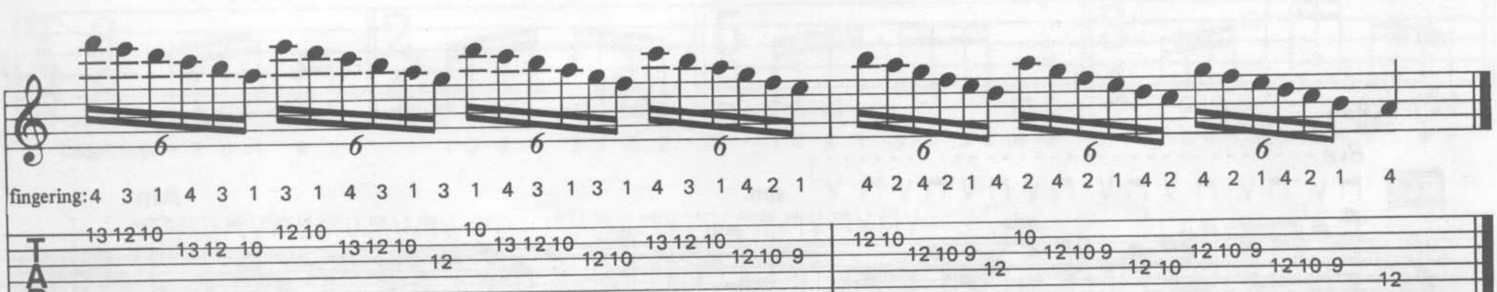
115



Exercise 116 uses a six note sequence.

116
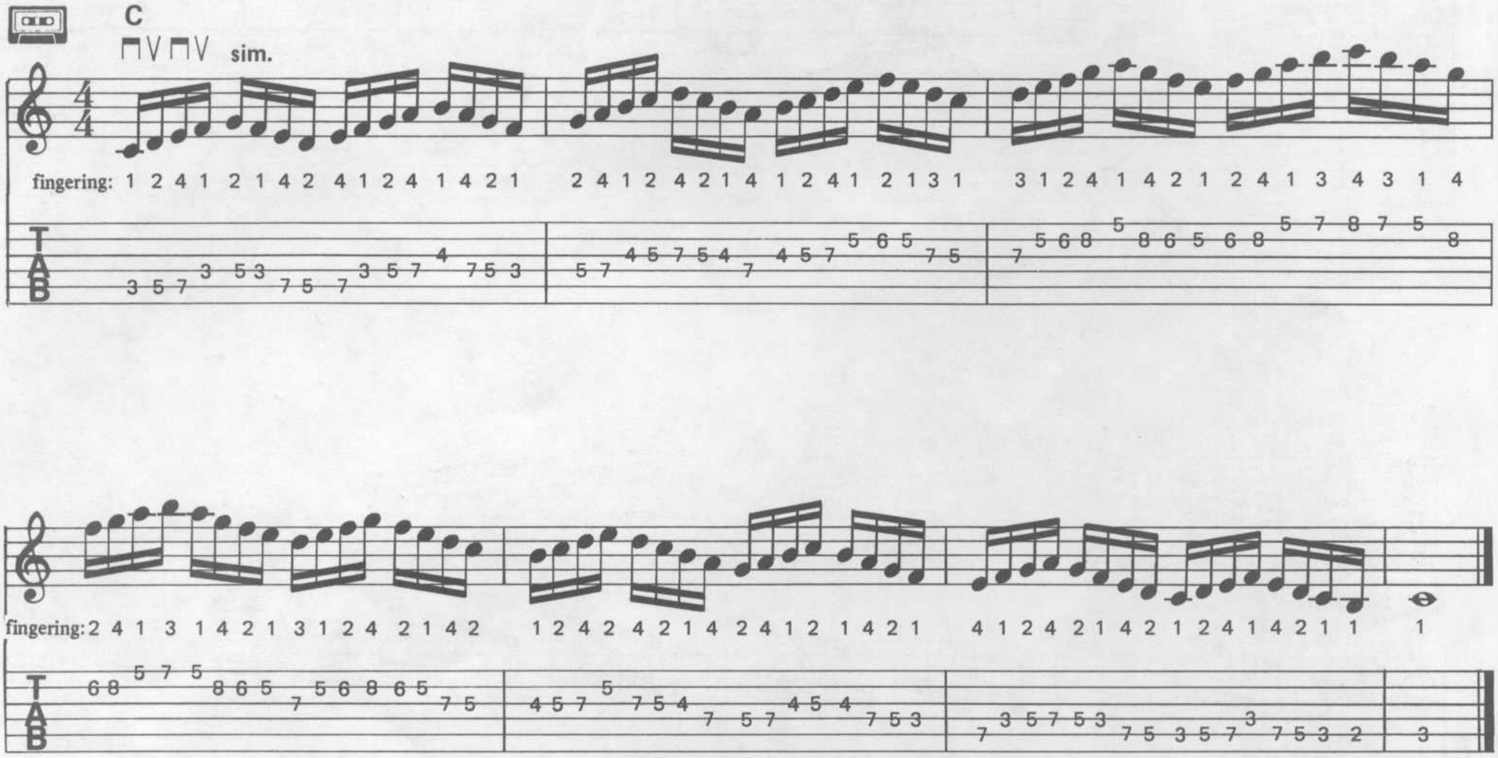




The sequence for Exercise 117 is:

Up: 1 2 3 4 5 4 3 2, 3 4 5 6 7 6 5 4, 5 6 7 8 9 8 7 6, etc...

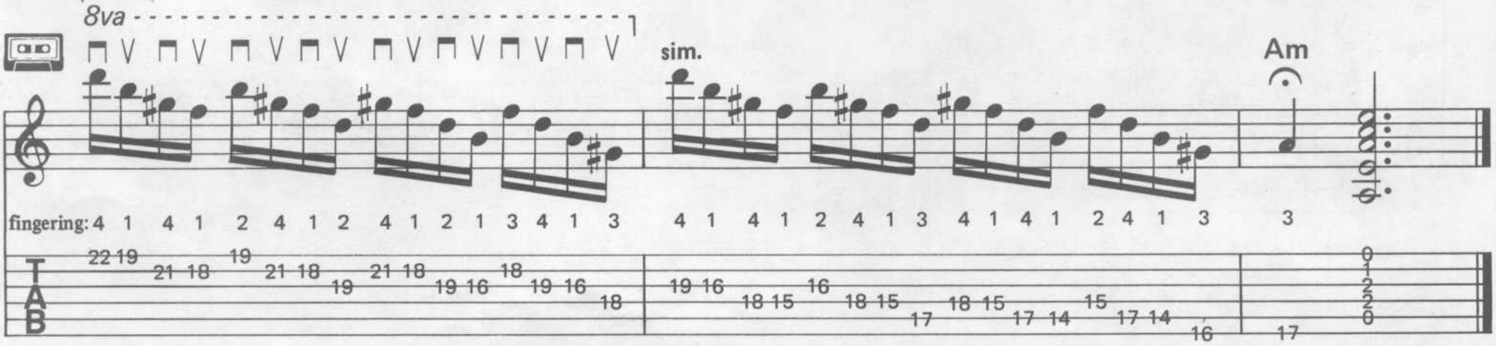
Down: 8 9 10 11 10 9 8 7, 6 7 8 9 8 7 6 5, 4 5 6 7 6 5 4 3, etc...

117



Exercise 118 moves through a diminished 7th arpeggio sequenced in descending groups of four.

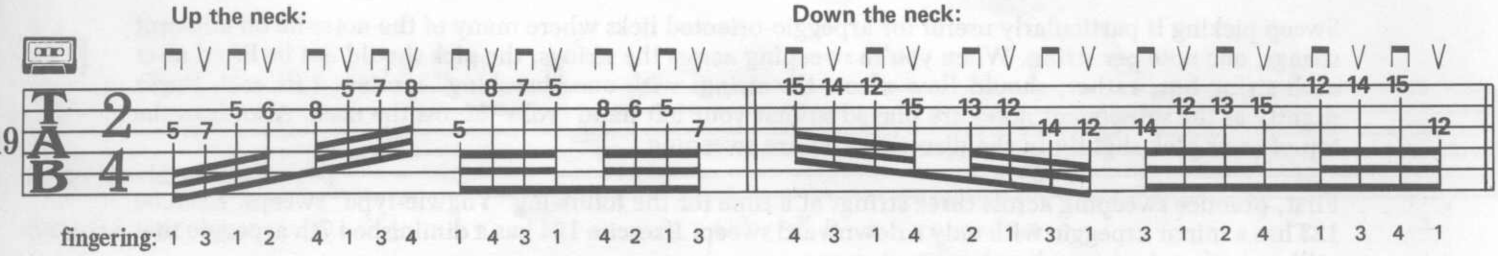
118



Practice these sequence patterns using different major, minor and pentatonic scales and arpeggios.

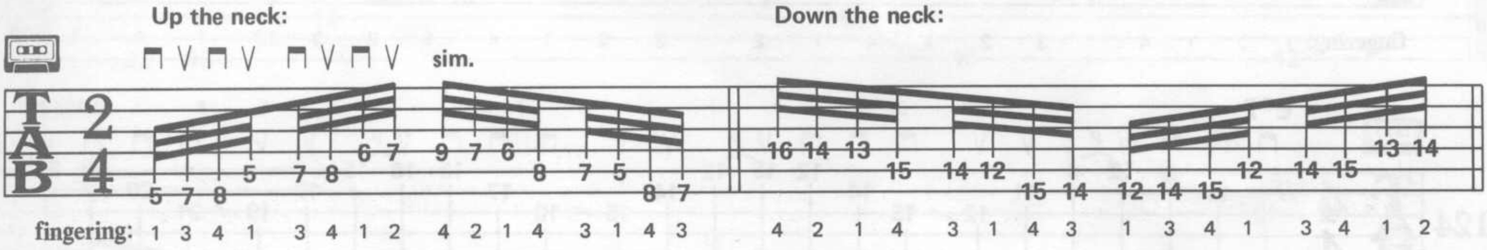
OTHER SPEED EXERCISES

In Exercise 119, you'll play a major scale in each position up and back down the neck.

119


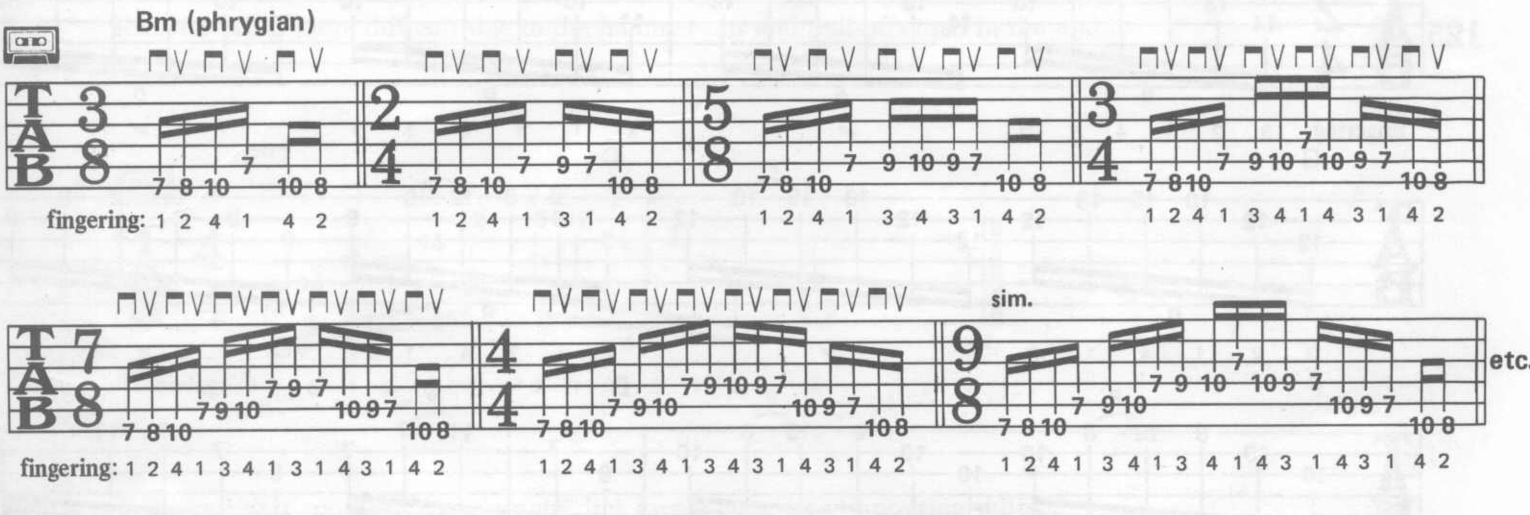
Continue up the neck through each position to XII, then come down the neck back to V.
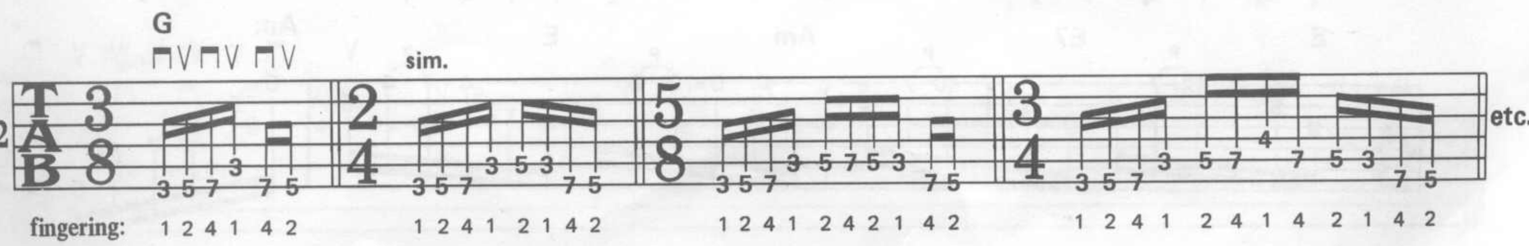
Exercise 120 applies the same idea to the harmonic minor scale.

120


Continue up the neck through each position to XII, then come down the neck back to V.

This final speed exercise is definitely one of the best and deserves a lot of attention. Begin slowly, and gradually build up speed as you add one note of the scale at a time. This is a great way to practice any new scale that you are learning. Try using different scales.

121


122

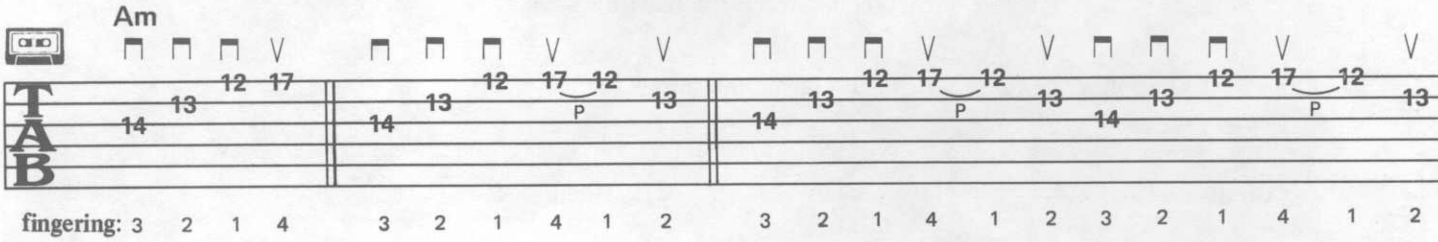

Sweep Picking

SWEEPING ARPEGGIOS

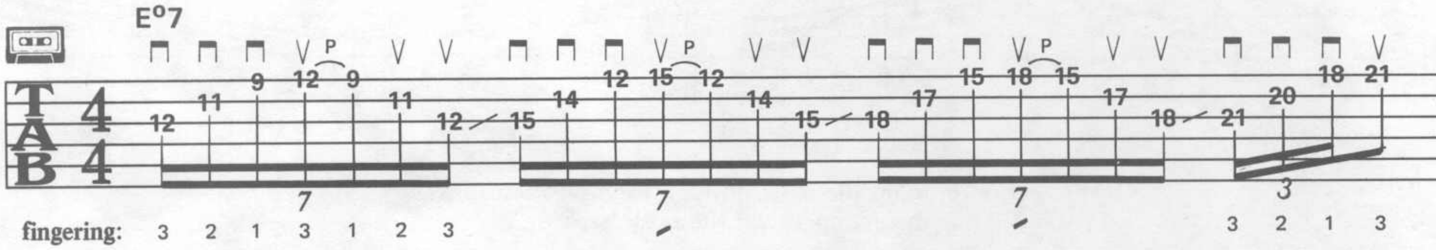
Sweep picking is particularly useful for arpeggio-oriented licks where many of the notes lie on adjacent strings, one note per string. When you're sweeping across the strings, the pick should not be lifted after each string but, rather, should flow across the strings with one "brushing" motion. Lift each finger slightly as the subsequent notes are played so that your left hand "rolls" across the neck. Also, lean the top of your pick slightly in the direction you are sweeping.

First, practice sweeping across three strings at a time for the following "Yngwie-type" sweeps. Exercise 123 has a minor arpeggio with only a downward sweep. Exercise 124 has a diminished 7th arpeggio that utilizes both a downward and upward sweep.

123

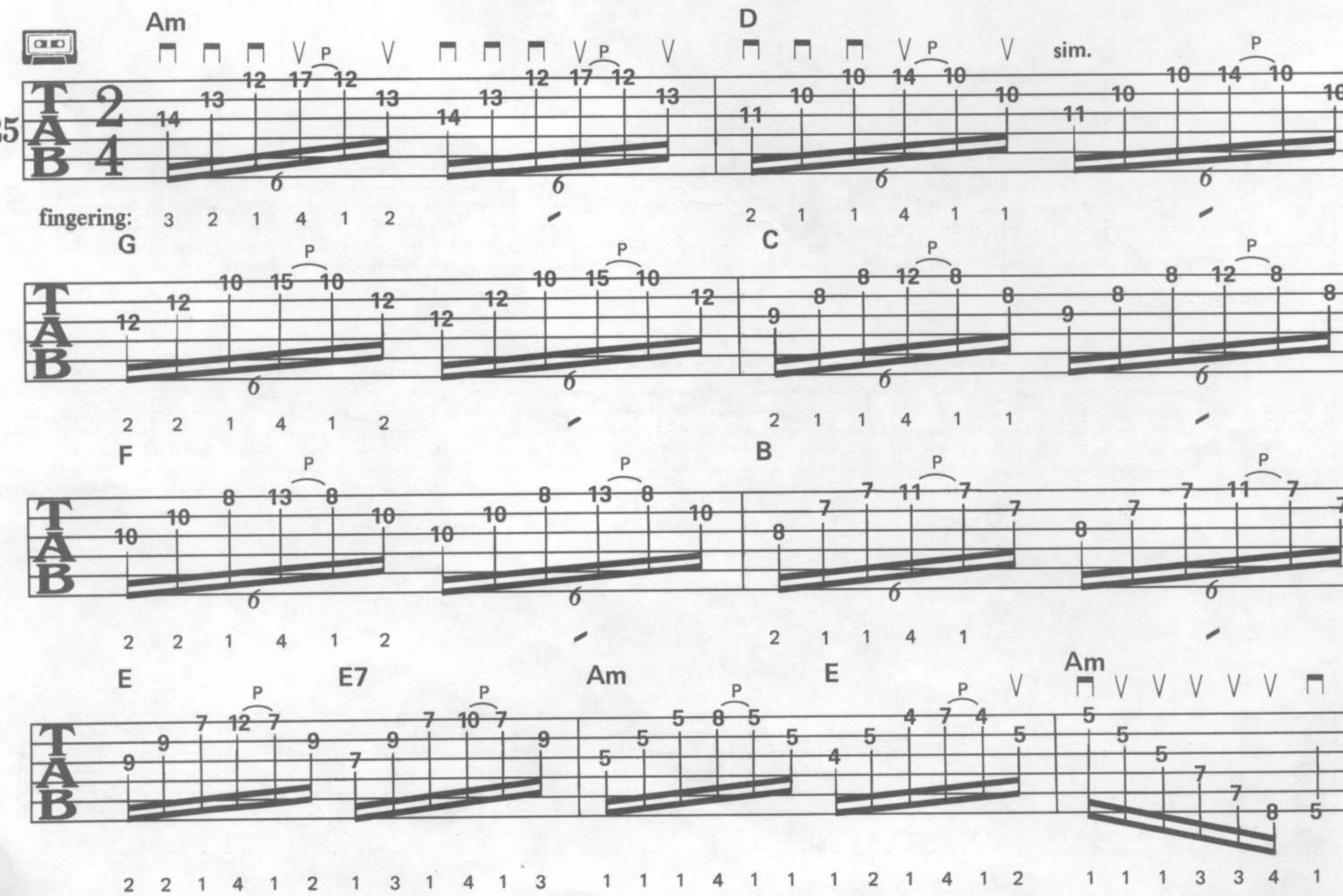


124

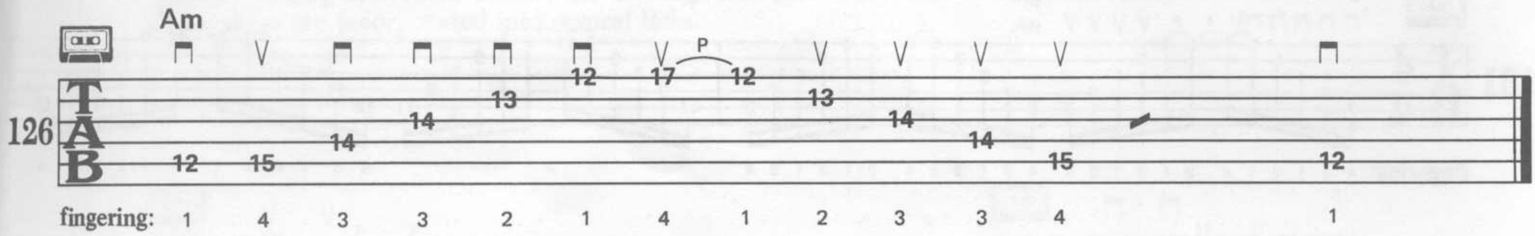


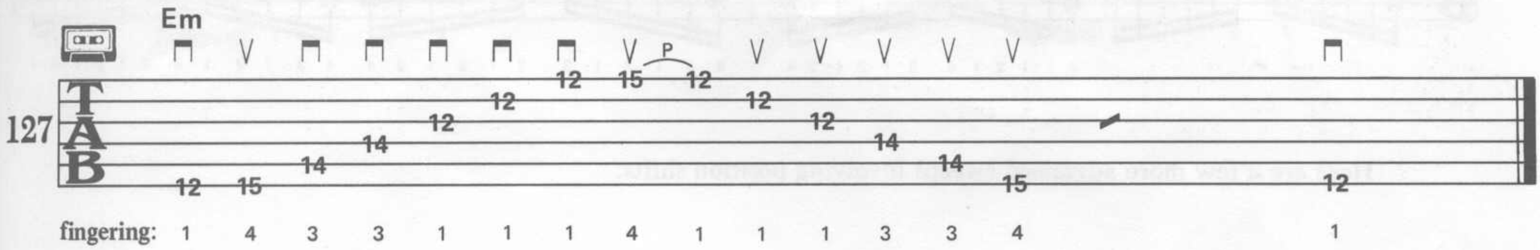
The following exercise incorporates the three-string sweeping pattern repeatedly. Concentrate on making the notes in each sweep sound rhythmically even.

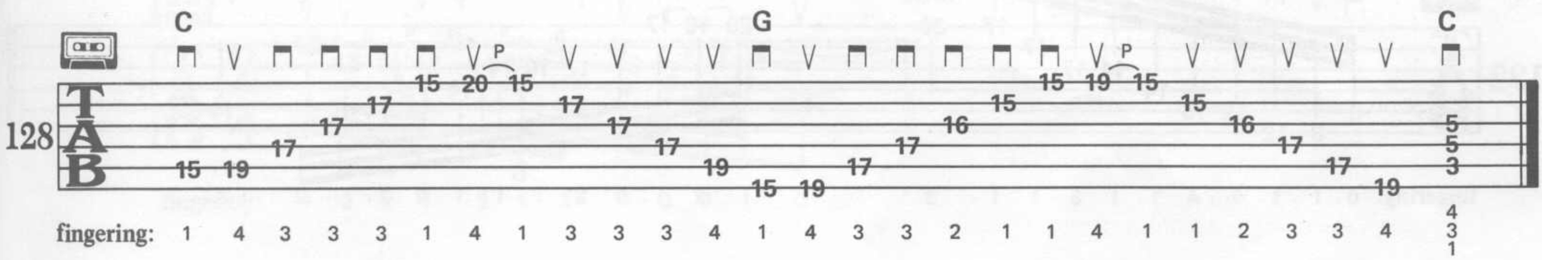
125



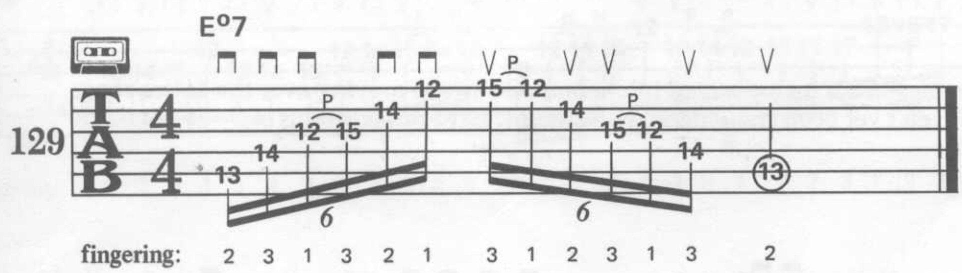
Exercises 126, 127, and 128 employ the sweeping technique for two-octave arpeggios. Concentrate on keeping all of the notes even. Also make sure that your left hand is "rolling" correctly to keep the strings from ringing together.



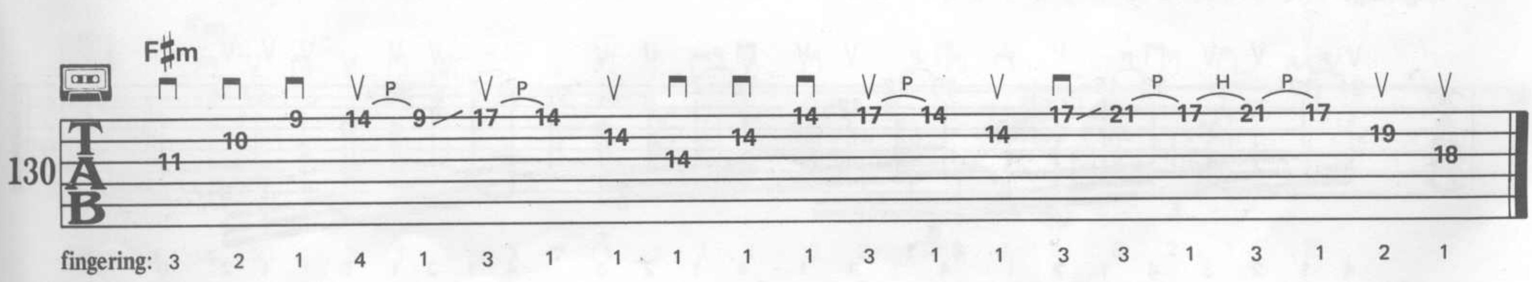




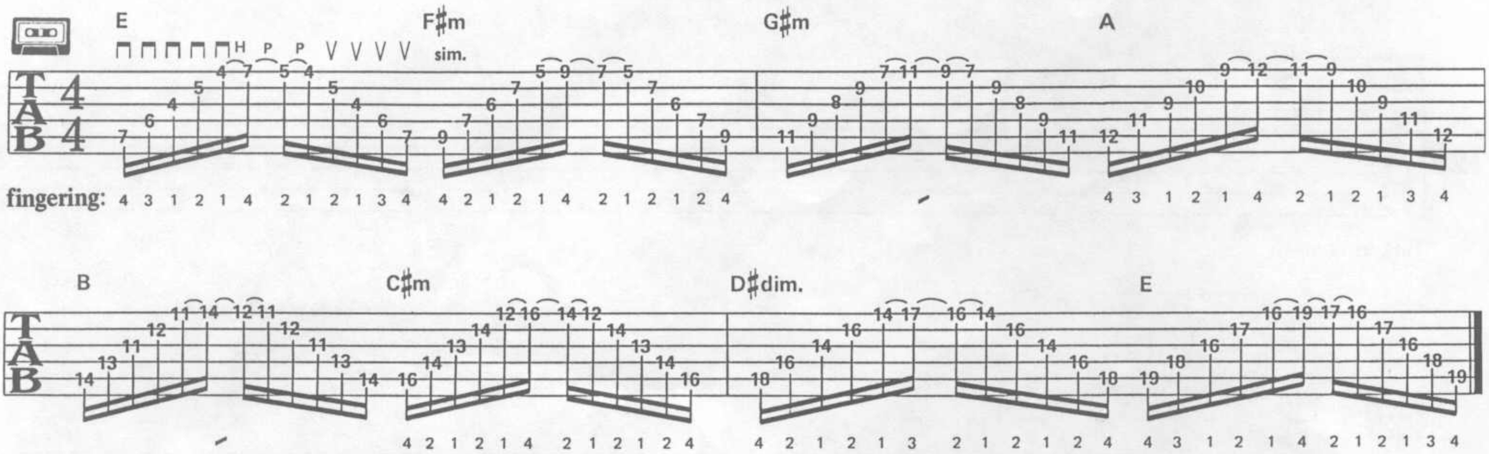
Exercise 129 is more difficult due to the hammer-ons and pull-offs used in the middle.



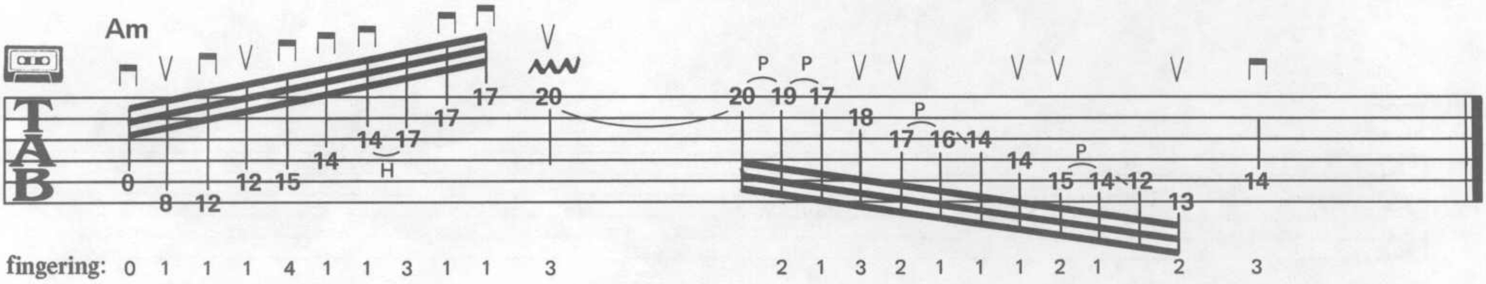
Exercise 130 is another "Yngwie-style" lick involving left-hand position shifts.

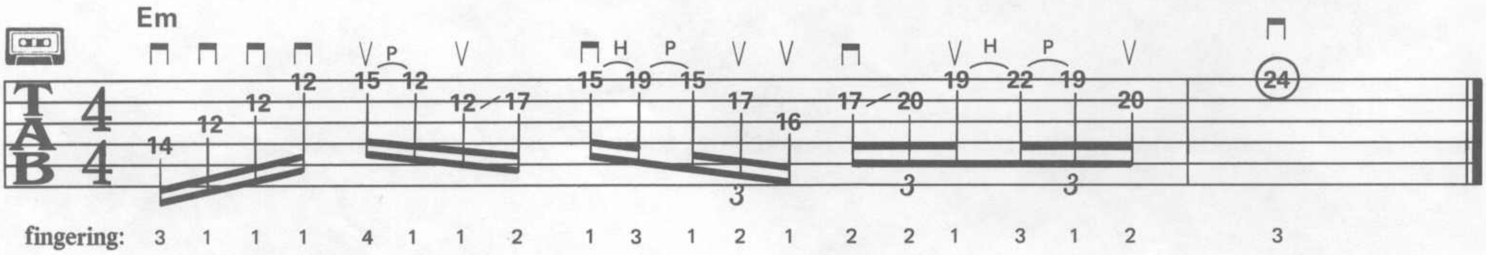


Exercise 131 moves through all the chords in the key of E major:

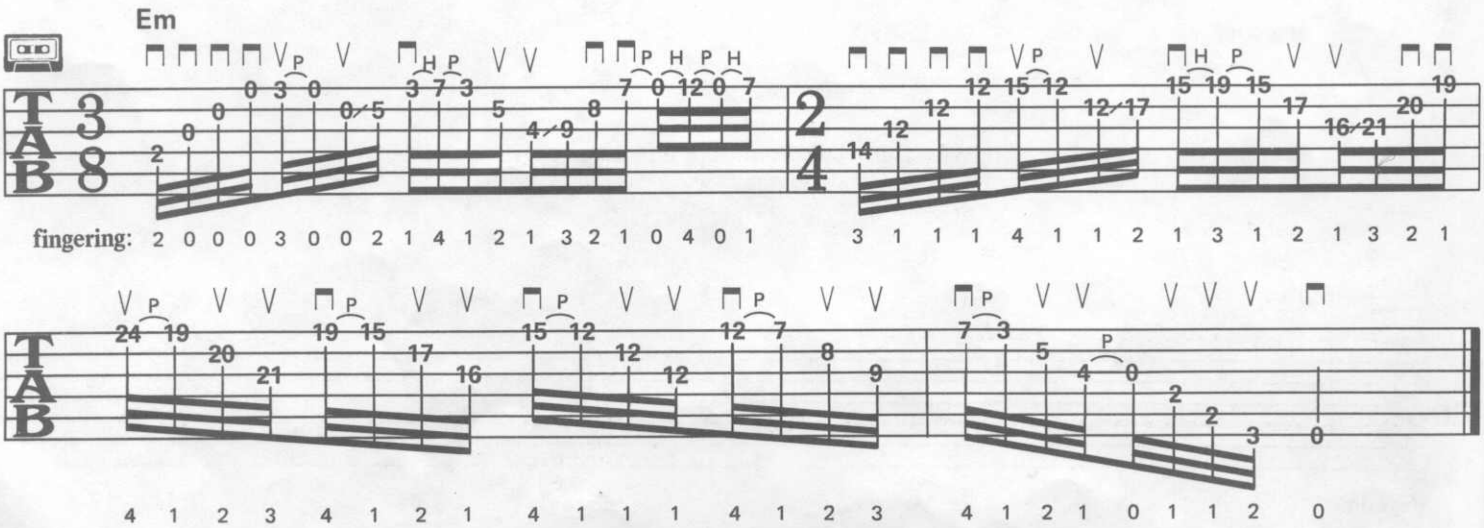
131


Here are a few more advanced sweeps involving position shifts.

132


133


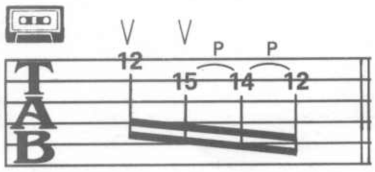
Now, the "sweep" from Exercise 133 is incorporated into a monster-sweep moving over the entire range of the guitar. (In case you haven't yet been challenged with sweeps, have fun with this one—it should do the trick!)

134


SWEEP PICKING IN LICKS

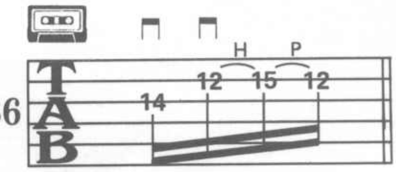
If a lick uses mostly hammer-ons and pull-offs, trying to maintain an alternate picking format may be more of a burden than a help. Picking while crossing the strings may be more easily accomplished with a "sweep" picking approach. Below, the exercises first give some useful sweep/hammer/pull mechanics. Then, these are incorporated into several licks.

135



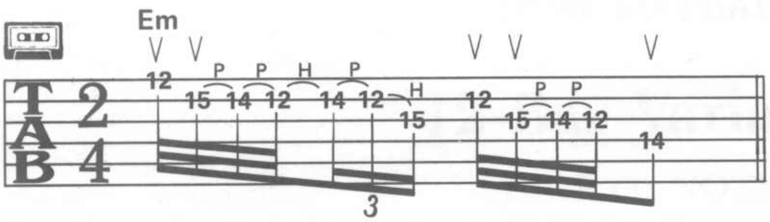
fingering: 1 3 2 1

136



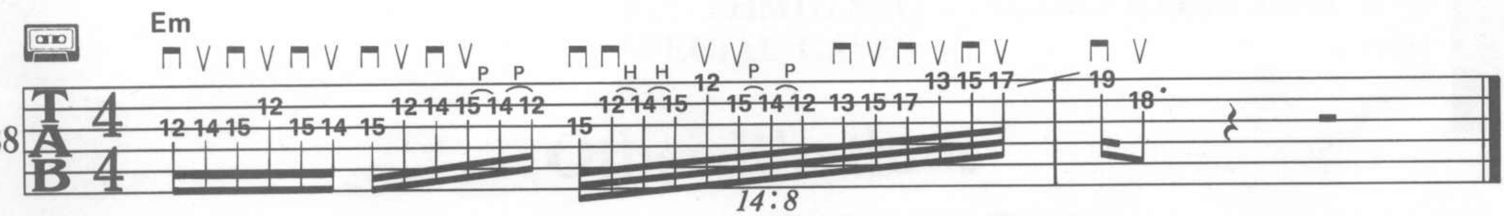
fingering: 2 1 3 1

137
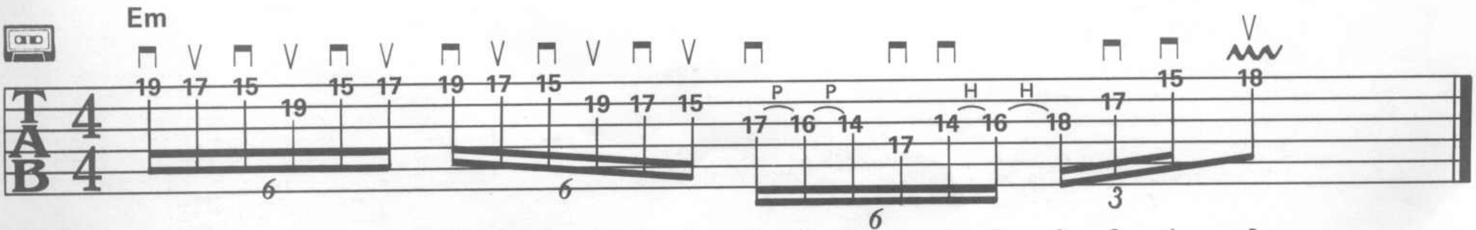


fingering: 1 3 2 1 2 1 3 1 3 2 1 3

138



fingering: 1 2 3 1 3 2 3 1 2 3 2 1 3 1 2 3 1 3 2 1 1 2 3 1 2 3 3 2

139



fingering: 3 2 1 3 1 2 3 2 1 3 2 1 3 2 1 3 1 2 3 2 1 3

PART TWO

HOW TO PRACTICE RHYTHM EXERCISES

12-Bar Variations

EIGHTH NOTES AND UPBEATS
CUT TIME

"Offbeats"

SIXTEENTH NOTE OFFBEATS
TRIPLET OFFBEATS
RHYTHMIC SEQUENCING EXERCISES
SPECIAL CASES

Other Rhythms

THE SHUFFLE RHYTHM
6/8 TIME
"CAPRICE NO. 10"

A strong and solid feeling for rhythm is very important. It is the foundation that all of your lead skills rest upon, and without good timing nothing will sound very good. Unfortunately, for most lead players this is also the *least*-practiced skill.

A musician arranges sounds in time. Rhythm, in its most general sense, refers to the whole time aspect of music. Sometimes something is said to be "rhythmic" when its quality of rhythm is particularly catchy of repetitious, but really all music has rhythm—all music is made up of sounds arranged in time.

In a more specific sense, "rhythm" refers to the particular time relationships used in a certain phrase. In this case, a rhythm is a *specific* sequence of long and short notes.

When you hear a rhythm, you naturally sense a pulse of beats seemingly "underneath" the rhythm. Anytime you tap your foot (or perhaps more appropriate—"bang your head") as you listen to music, you are feeling this pulse. Technically, this is called the *meter*, more commonly referred to as the "beat." Often, the rhythm will momentarily coincide with the beat, then move opposite or contradict it, and then join back up to it. This interaction between the rhythm and the underlying meter is fundamental to rock music—it is found in every song.

To play well (whether in the lead guitar part or the so-called "rhythm" guitar part) you need to develop the ability to feel the beat (meter) at all times. How can you play an offbeat (note falling between beats) perfectly in time, if you can't feel where the downbeat is? The better you maintain feeling the beat as you play opposite to it, the better and more accurate your rhythms will be. When everyone in the band feels it, the band will be tight. Being well-grounded in feeling the meter is commonly called being in the "groove."

Because most everyone is visually-orientated, and the note patterns are *seen*, they get most of the attention. But rhythm deserves some of your time as well. The better you learn rhythmic notation, the better you will be able to visualize rhythms. You will understand each note's particular relationship to the meter, and it will help you to play rhythms better, learn new rhythms faster, remember them better, and create your own more quickly.

HOW TO PRACTICE RHYTHM EXERCISES

Most guitarists can keep track of the beat in their mind while they're playing, but that is not a very reliable method of keeping time. As you know, when you are doing something you enjoy the time seems to go faster than when you are bored. That's a good indication that the mind is not to be trusted with timing. When you play something easy, you may be able to keep time in your mind. However, when the music gets difficult, you must concentrate more on playing the notes and you can't keep the same consciousness of the rhythm.

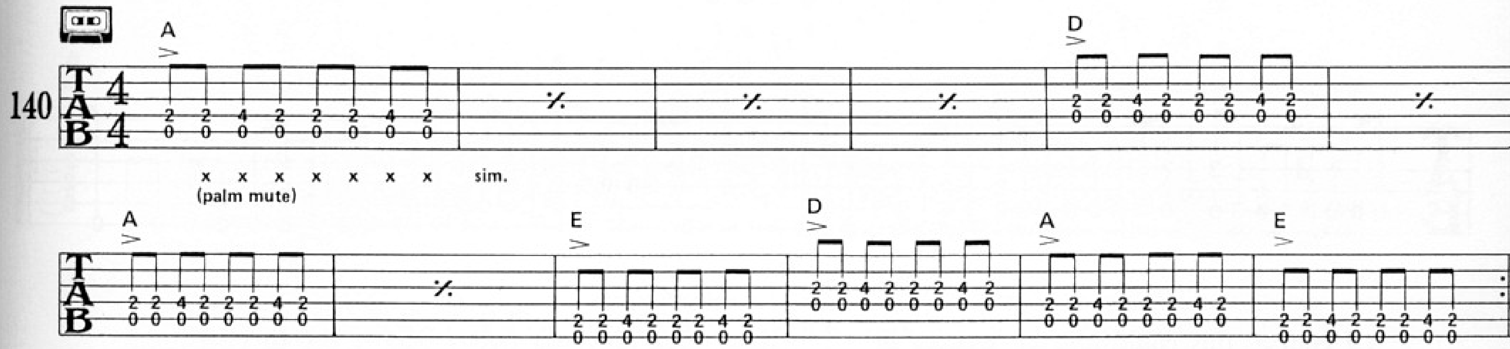
You need to be able to *feel* the groove instead of thinking it. In the following exercises, make sure that you are tapping your foot evenly as you play. In fact, the main point of these exercises is to feel the beat (foot tapping) at the same time that you play against it. You are practicing to feel two different things at once.

The following exercises use rhythm notation with tablature. For a review of rhythm symbols, see page 5 in the introduction section.

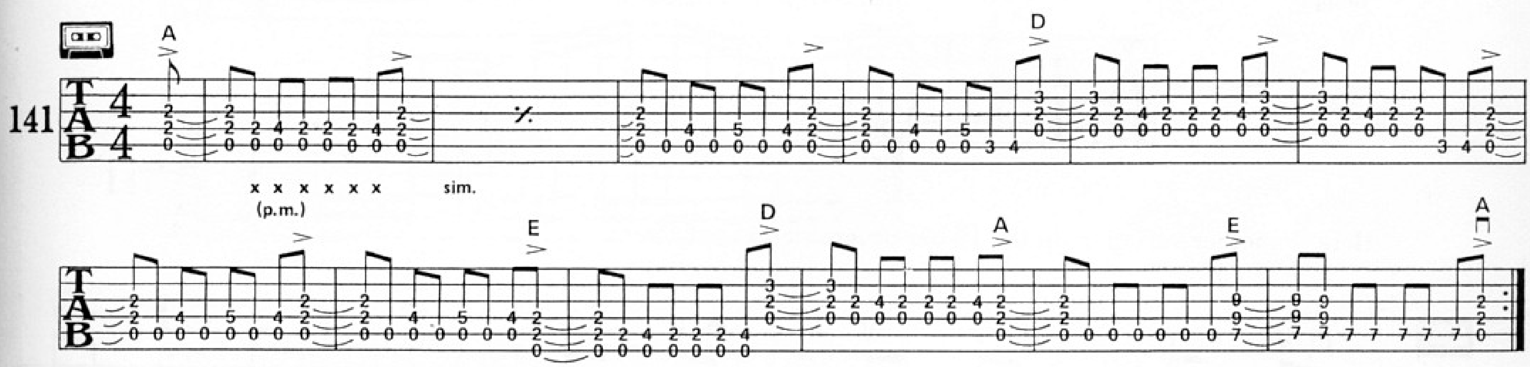
12-Bar Variations

EIGHTH NOTES AND UPBEATS

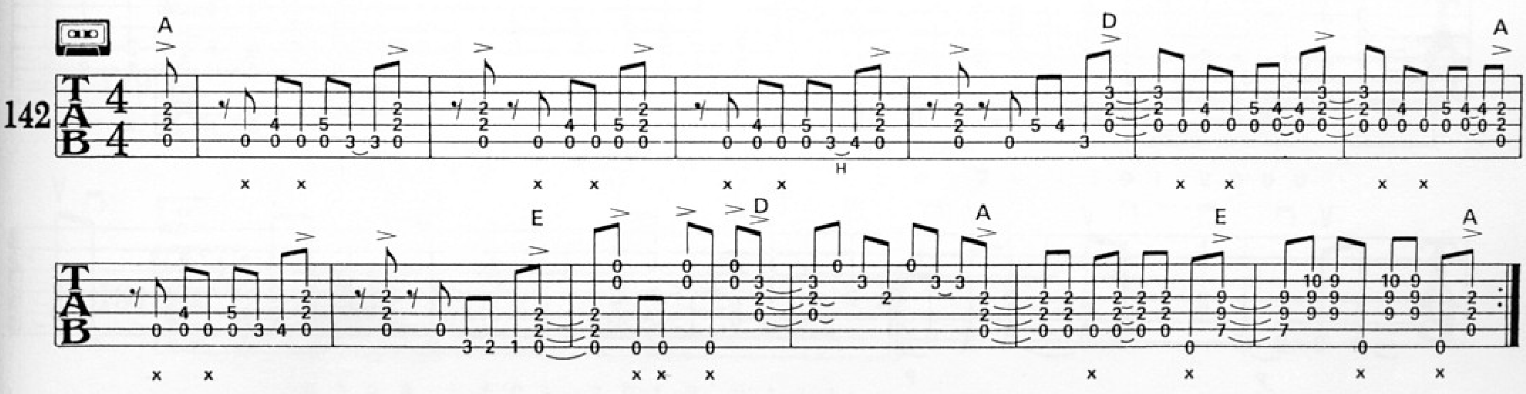
Exercise 140 is a common 12-bar progression. The goal is to develop the ability to feel the meter, and at the same time feel a different rhythm. It is the deeper feeling of the beat, coming from inside you, that drives both your foot and your hand. Try to feel it throughout your body. Your hand, playing eighth notes, should be moving twice the speed of your foot, which is tapping quarter notes. Play all downstrokes, and use a palm mute (but lift it for the accented chords). *Remember: if you are not tapping your foot with the meter, you are not practicing this exercise.*



In Exercise 141, the accents fall on the upbeat of beat four (from the previous measure) and are tied over into the downbeat of one. This is known as a *syncopated* rhythm. Listen to the cassette and notice the interaction between the downbeats and the accented chords. Keep your foot tapping on the downbeats. When you play the accents, your foot should be in the air (for the upbeat). Pratice along with a metronome.



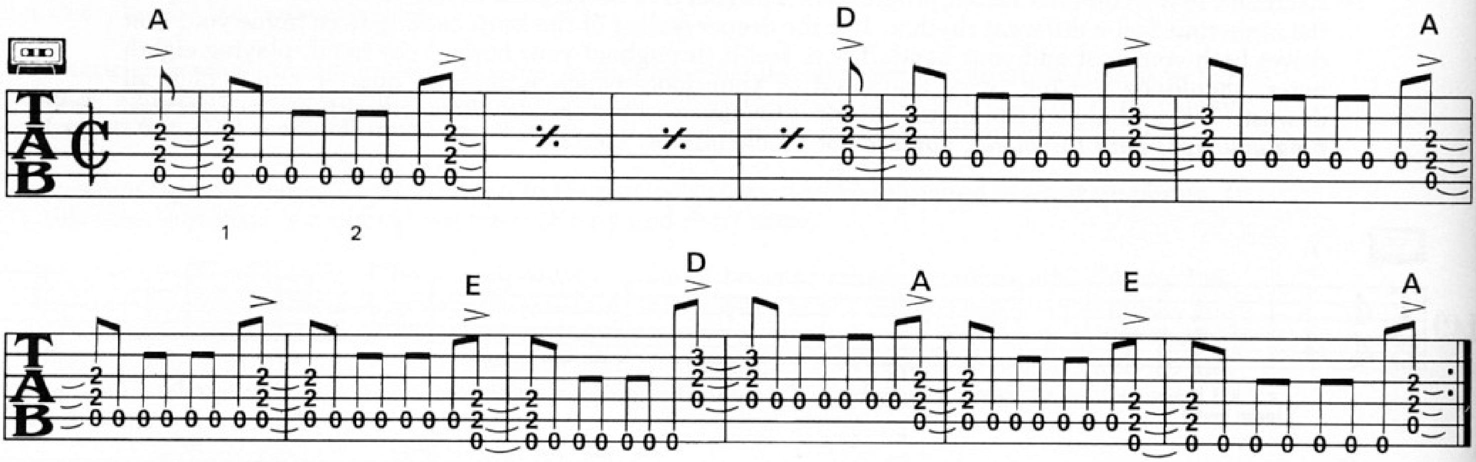
Exercise 142 uses several upbeats within the measure. Repeat one measure at a time slowly until you can tap your foot evenly. Use the metronome at various speeds for all of these exercises. The metronome is a good test of how steady your rhythms really are; it doesn't lie.



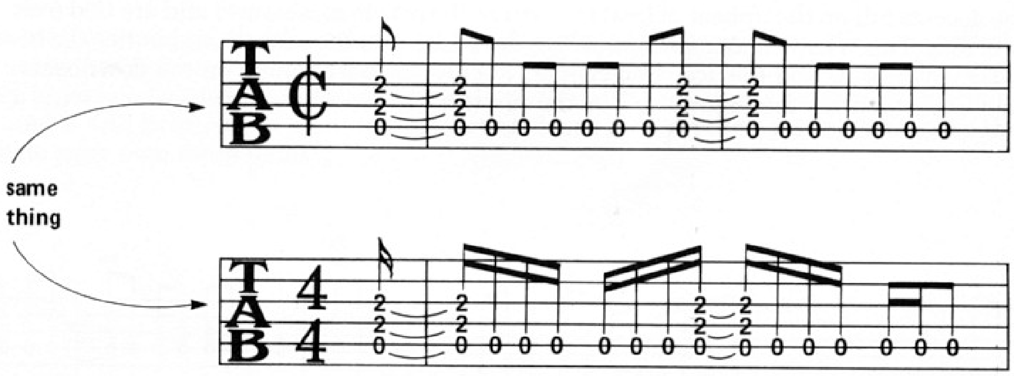
CUT TIME

Exercise 143 uses the rhythm of Exercise 141, but puts it into cut time. Cut time (₵) means the time value of all notes is cut in half. Quarter notes are played as eighths, eighths as sixteenths, etc. Play the exercise as you did for 141, but tap your foot only on beats 1 and 3.

143

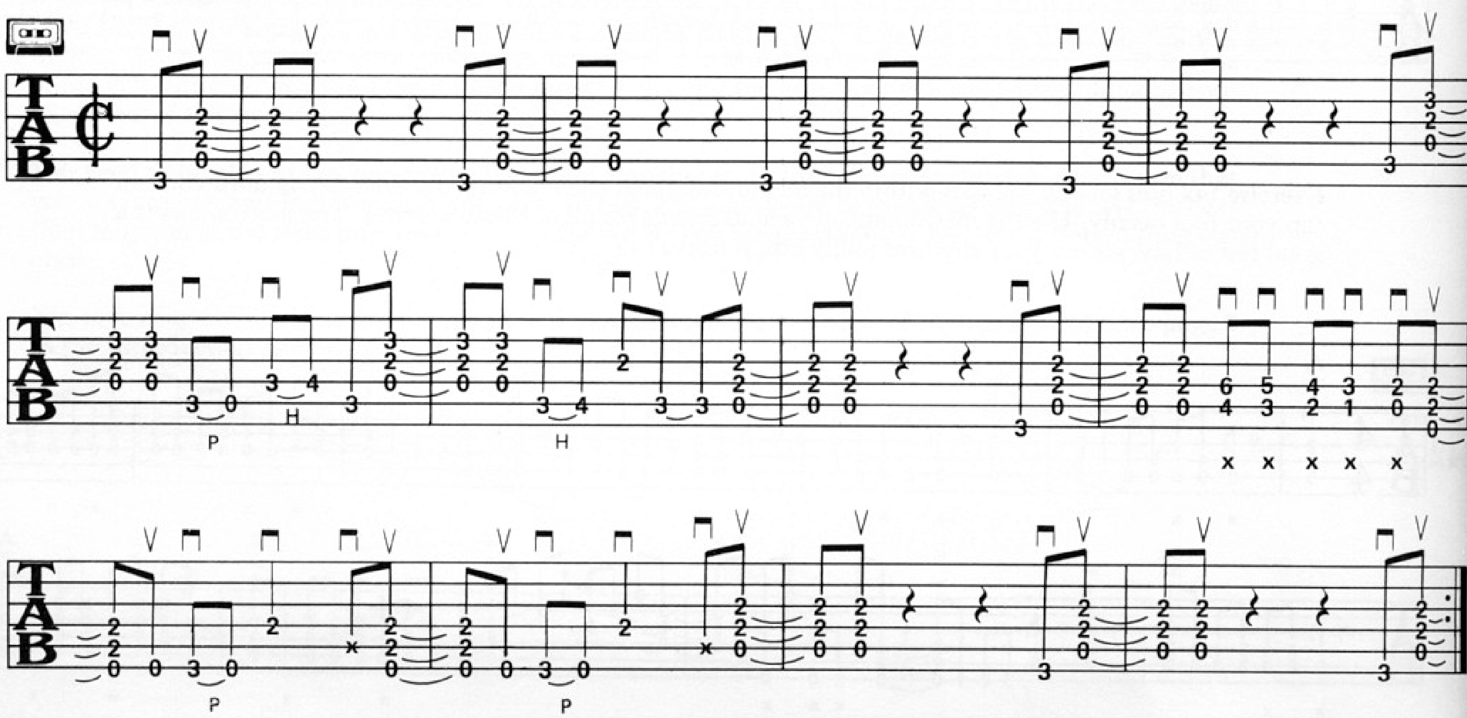


Of course, this could also be written in 4/4 time using sixteenth notes. Below, the first two measures are written first in cut time, then the same thing is written in 4/4 time.



Here is another variation on the 12-bar progression in cut time.

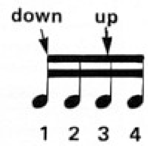
144



"Offbeats"

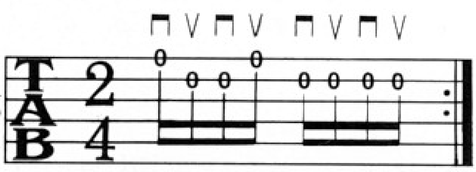
SIXTEENTH NOTE "OFFBEATS"

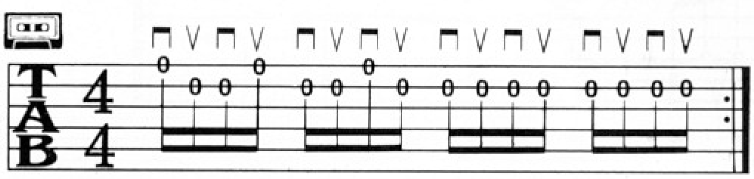
As the rhythms get more complex, the key to good timing lies in the ability to feel *all* of the subdivisions of the beat—even the ones you are not playing. At this point, you should have a good handle on eighth note subdivisions (downbeats and upbeats). When the beat is subdivided into four parts (sixteenth notes), the downbeat falls on the first sixteenth while the upbeat falls on the third.

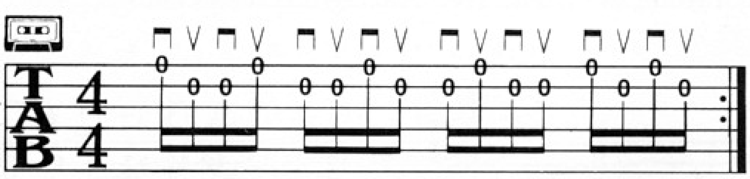


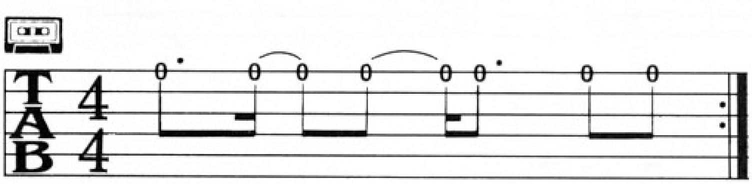
Now, you can work on accenting the more difficult sixteenth note "offbeats"—the second and fourth sixteenths.

The exercises below will help you to feel these "offbeats." Exercise 145 accents the fourth sixteenth. Exercise 146 adds the upbeat of beat two. Then Exercise 147 adds the second sixteenth of beat three and the down and upbeats of four. When the unaccented notes are left out, you have the rhythm shown in Exercise 148.

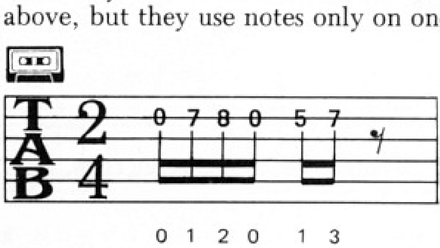
145


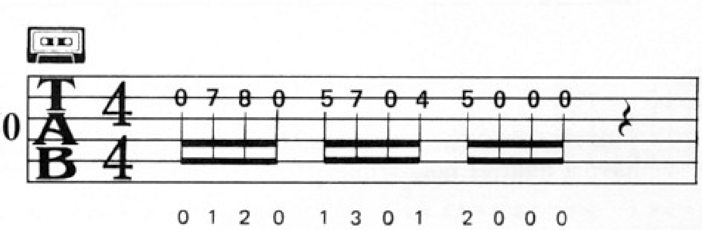
146


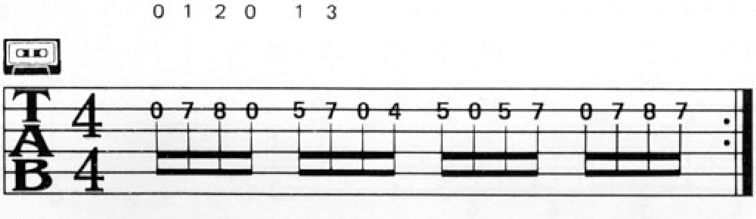
147


148


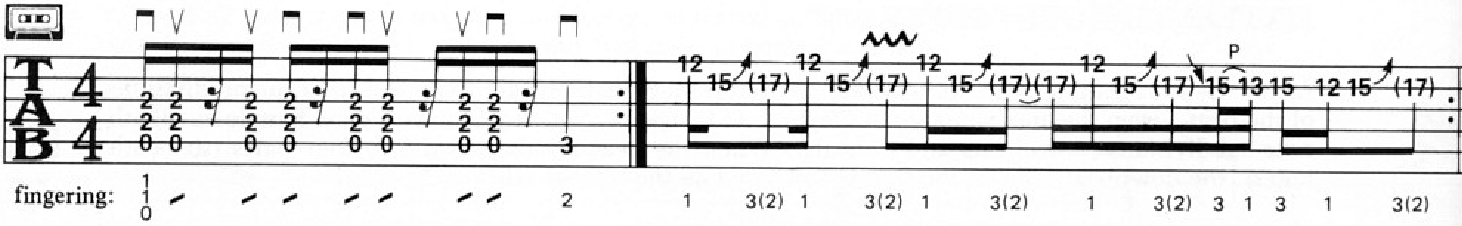
The above rhythm is very common. Listen to the rhythm guitar track after the solo in Led Zepplin's "Stairway to Heaven" for a classic example. Exercises 149, 150, and 151 are similar to the exercises above, but they use notes only on one string.

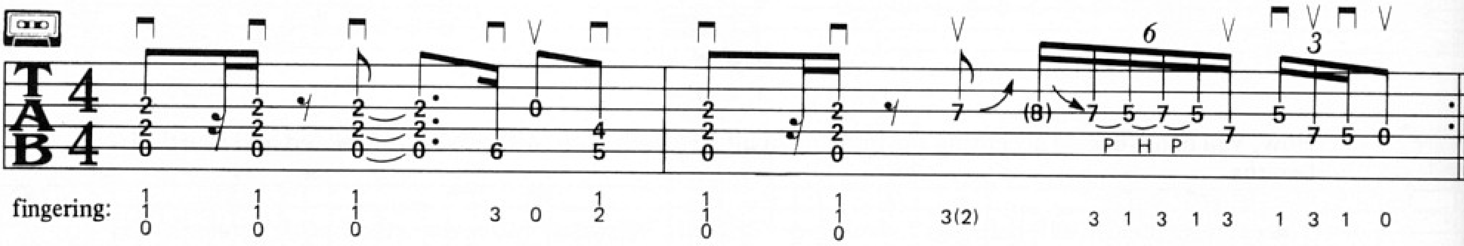
149


150


151


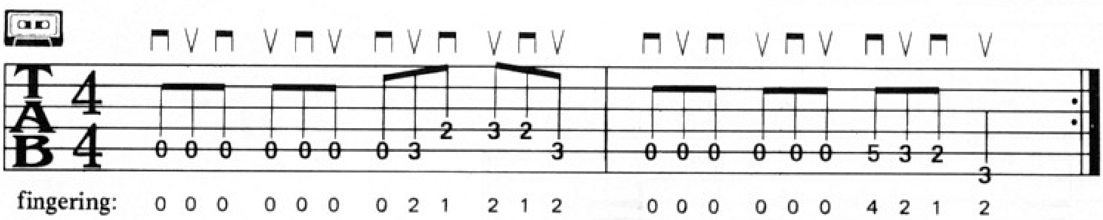
Here are a few riffs based on this rhythm.

152


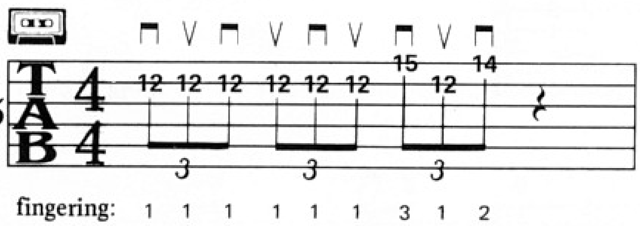
153


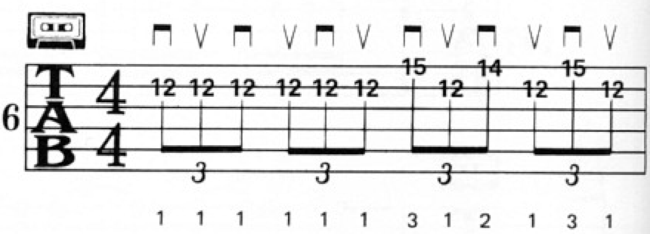
TRIPLET "OFFBEATS"

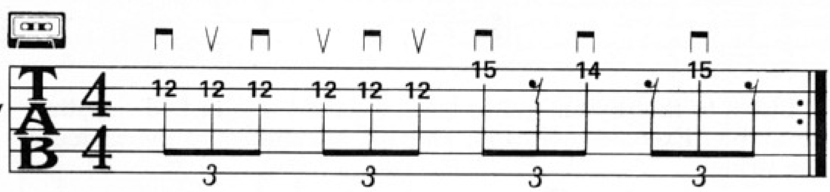
First, play Exercise 154 to get the hang of the triplet rhythm.

154


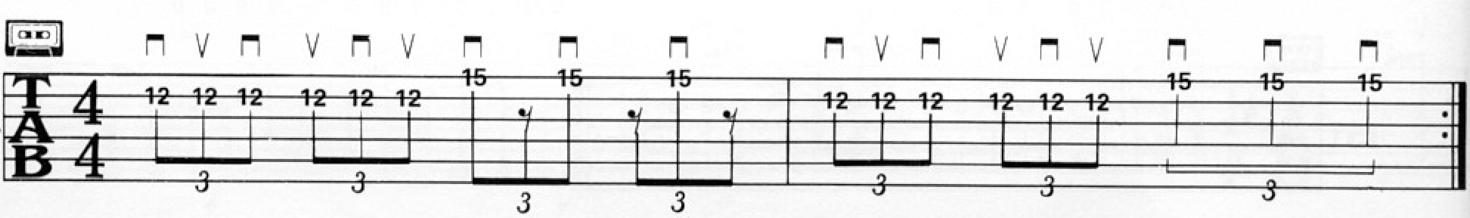
Exercises 155 and 156 build an "offbeat" rhythm in triplets. Then Exercise 157 leaves out the unaccented notes.

155


156


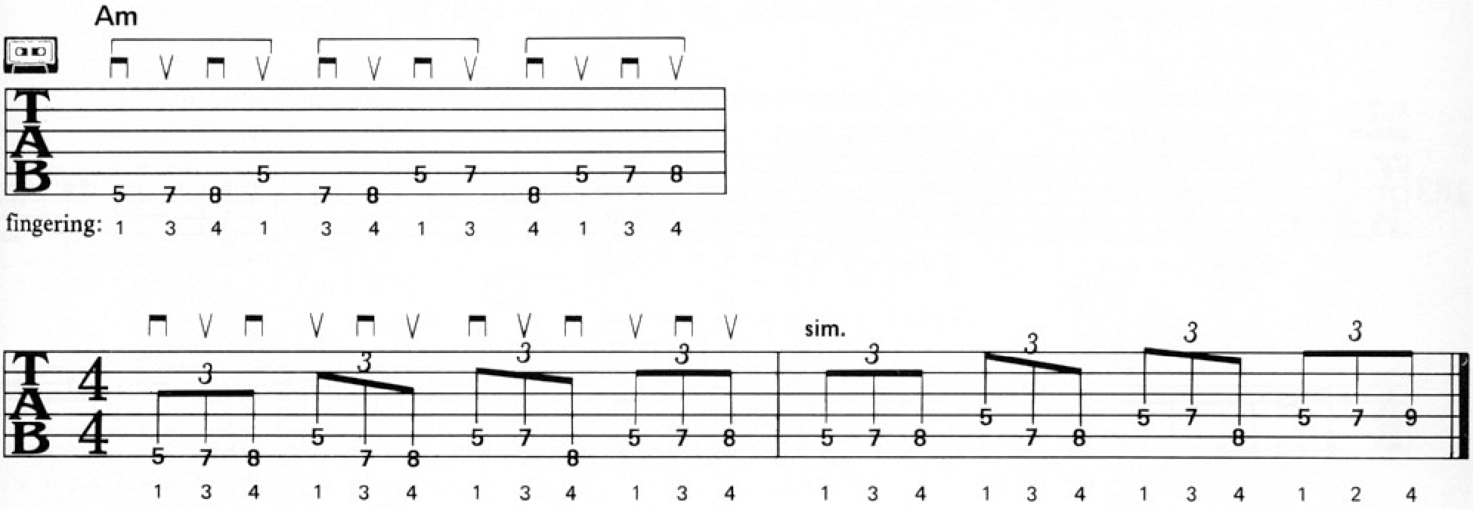
157


This rhythm is three evenly spaced notes in two beats. If we let the notes ring instead of playing rests, we have a quarter note triplet:
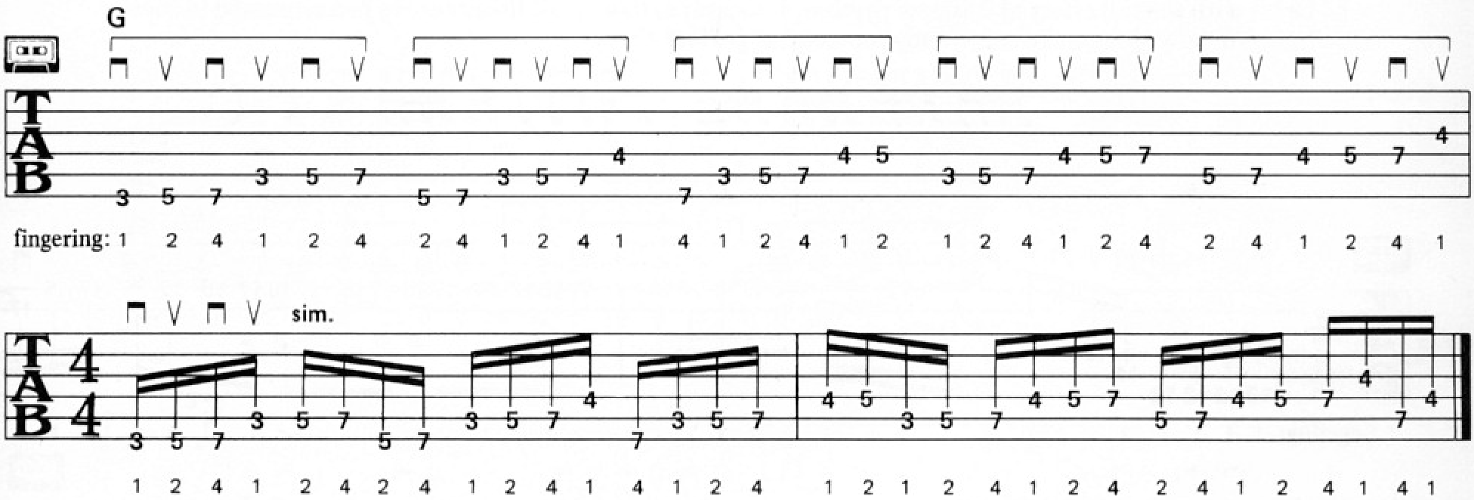
158


RHYTHMIC SEQUENCING EXERCISES

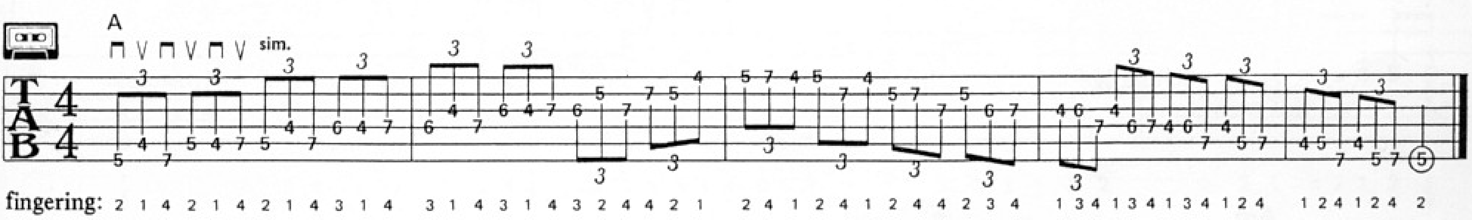
Another technique to help you get a feel for various offbeats is "rhythmic sequencing." That is, you play a sequence, but you play it in a different rhythmic grouping than the note pattern suggests. For example, Exercise 159 uses a sequence in groups of four notes that are played *over* a rhythm of triplets. Listen to the cassette and notice the rhythmic feel.

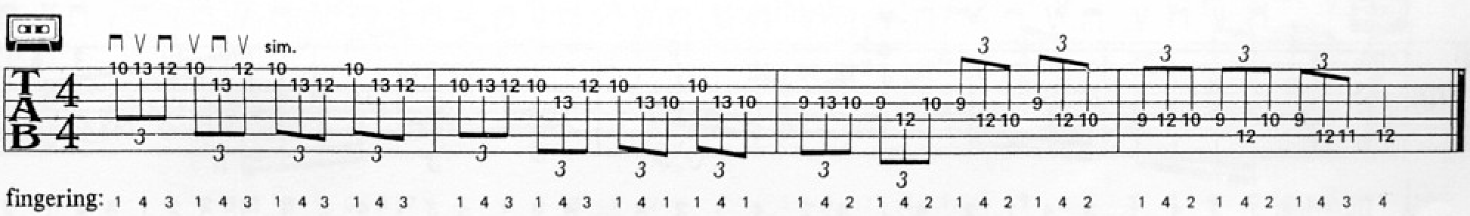
159


Exercise 160 uses a sequence in groups of six, played over sixteenth notes.

160

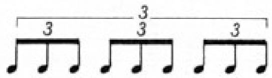

In the following exercises, first play the notes in their natural groupings, as above. Then try it with the timing written. This technique can be applied to practically any exercise to make it more interesting to play.

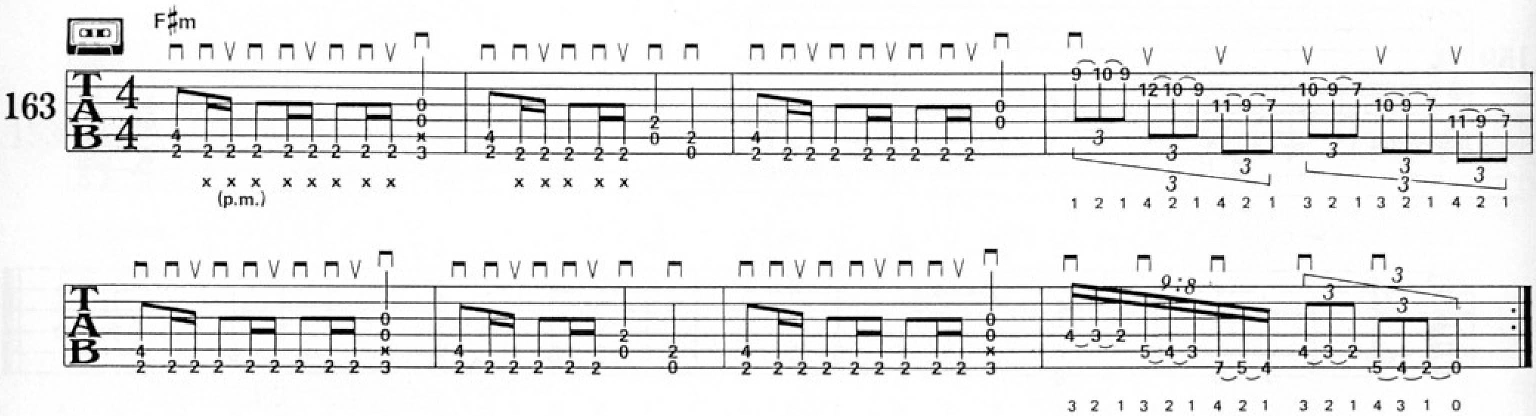
161


162


SPECIAL CASES

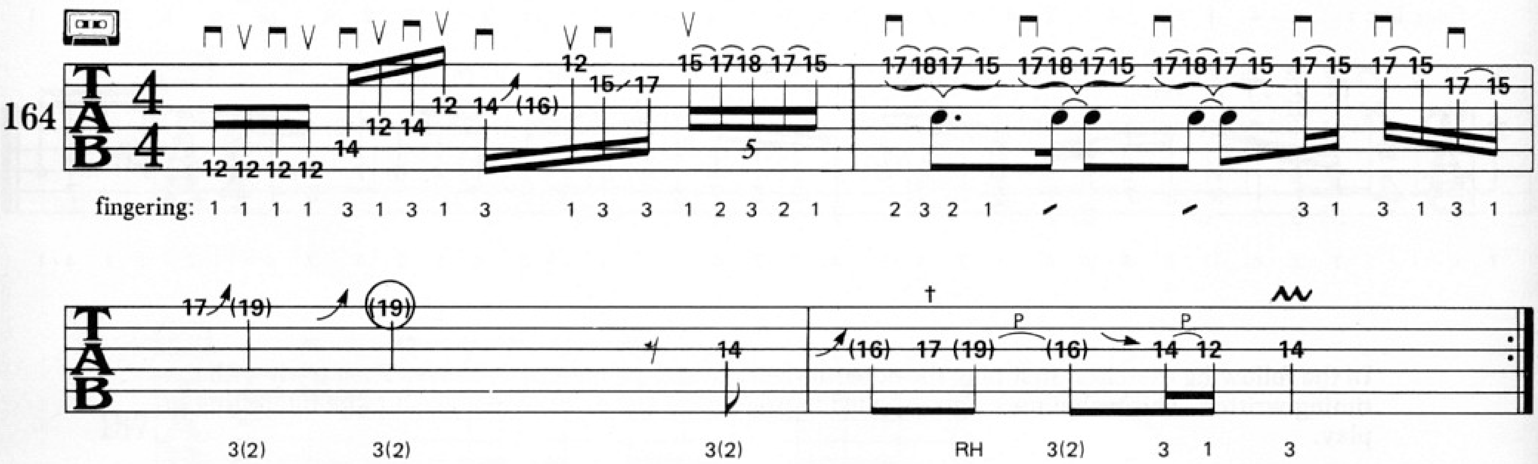
In Exercise 163, a triplet is played on each quarter note triplet, making a total of nine notes evenly spaced in two beats. It can be written like this;  , but feel the beat like this;



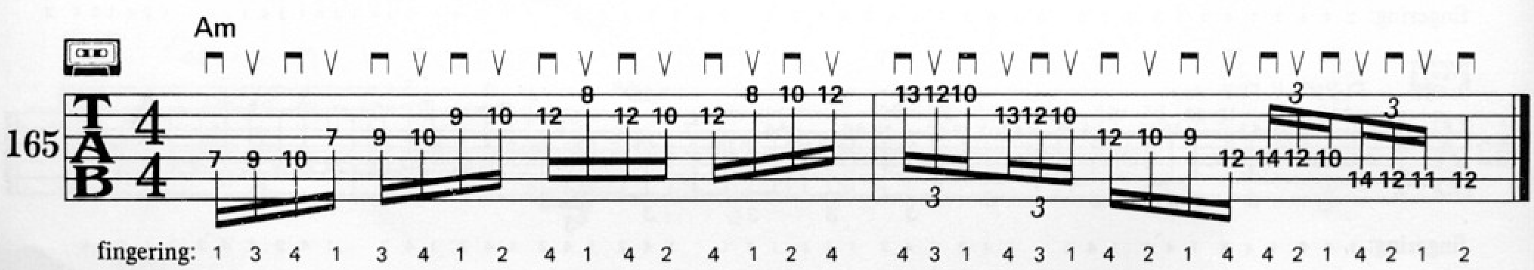


Exercise 164 is even more challenging. First, a rhythm similar to 148 is shown. In the second measure of the lick this rhythm is picked, but in each space of three tied sixteenth notes there are *four* evenly spaced notes! The first measure is there just to get you into feeling a sixteenth note subdivision so that you will be hit with the full effect of this new rhythm. It sounds as though all the notes are just crammed in there, but somehow they make sense and come out in perfect time!





Exercise 165 changes between triplets and sixteenth notes. Be sure to use the metronome as you practice this technique.

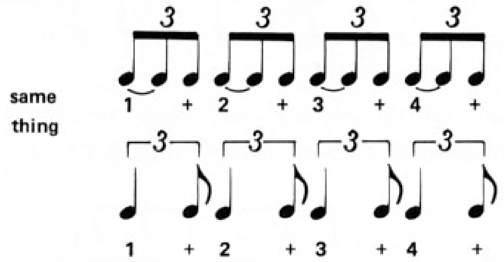


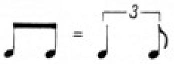
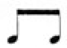
Other Rhythms

THE SHUFFLE RHYTHM

A swing or shuffle rhythm is common to "blues" and "blues-oriented" rock, but it isn't limited to only those styles. Many tunes by Stevie Ray Vaughan use a shuffle rhythm, but so does "Satch Boogie" by Joe Satriani, "I'm the One" and "Beautiful Girls" by Van Halen, and "Smokin' " by Boston, just to name a few.

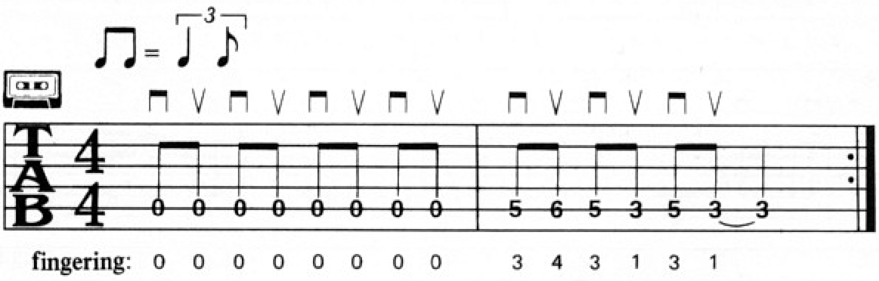
In a shuffle rhythm, the upbeat falls on the 3rd note of the triplet, instead of exactly half way between downbeats (as in a straight eighth note rhythm).



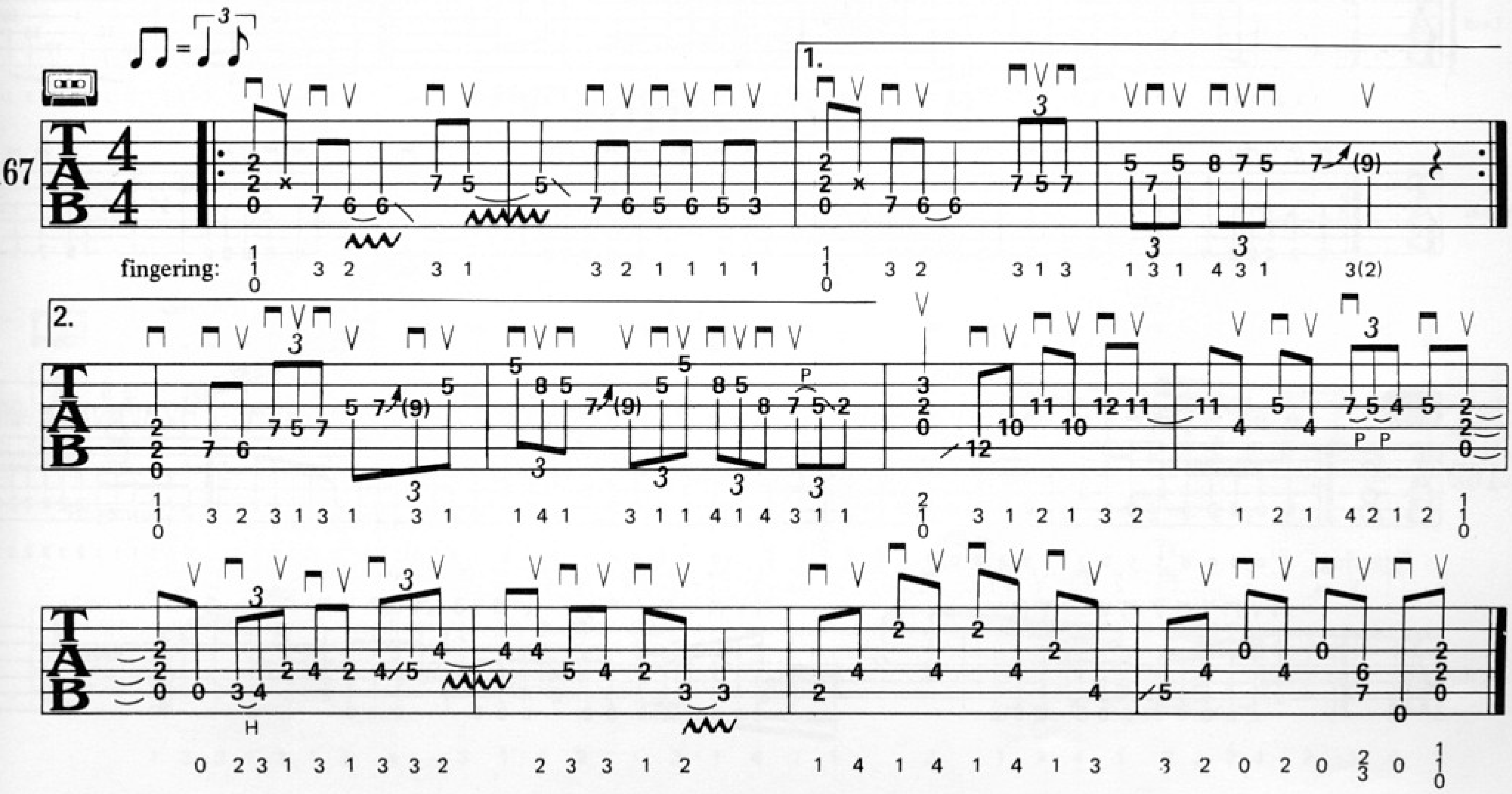
The symbol  is used at the beginning of a tune to indicate a shuffle rhythm. So, whenever you see this in the song: , play it like this: 

Practice Exercise 166 to get a feel for the shuffle rhythm. Exercise 167 uses this rhythm in a longer phrase. Make sure your picking is correct or it will be more difficult to get the feel.

166

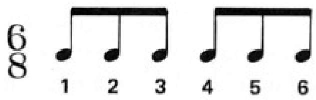


167

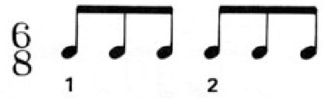


6/8 TIME

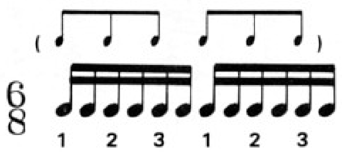
6/8 time is a meter sometimes used in "classically-influenced" heavy metal. In this time signature, there are six beats with an eighth note receiving one beat:



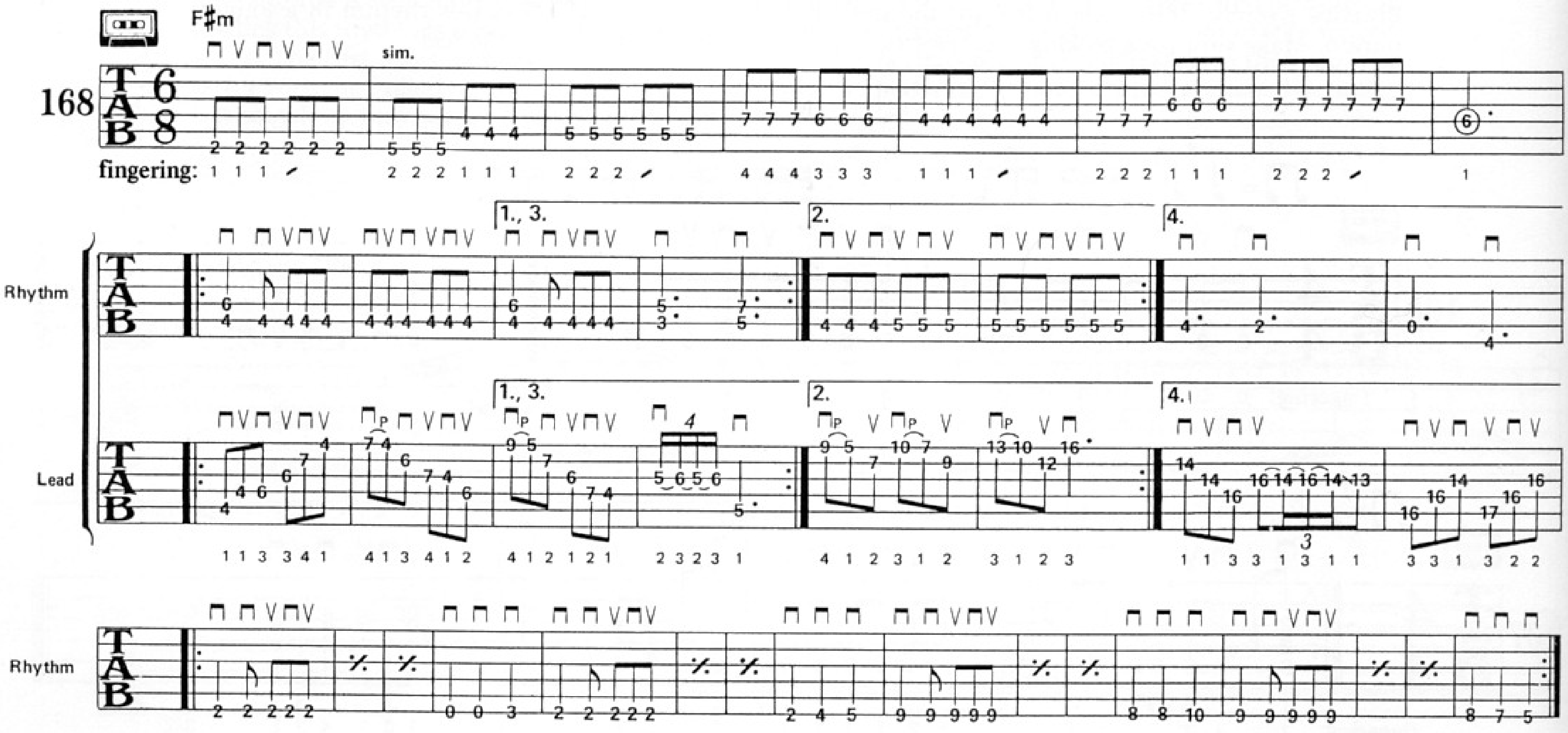
Here is the more commonly played "cut time" version of 6/8 with only two beats per measure:

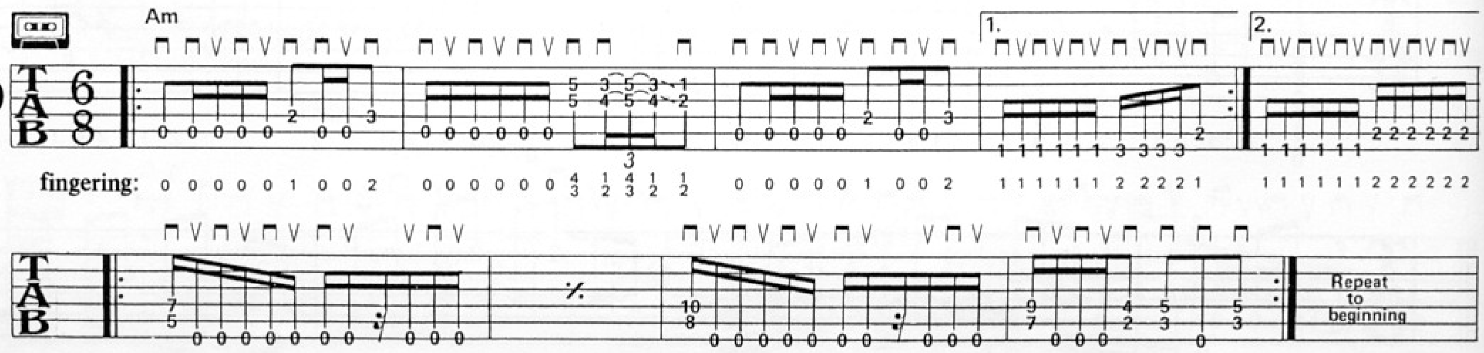


When sixteenth notes are played in this meter, there are six per beat.



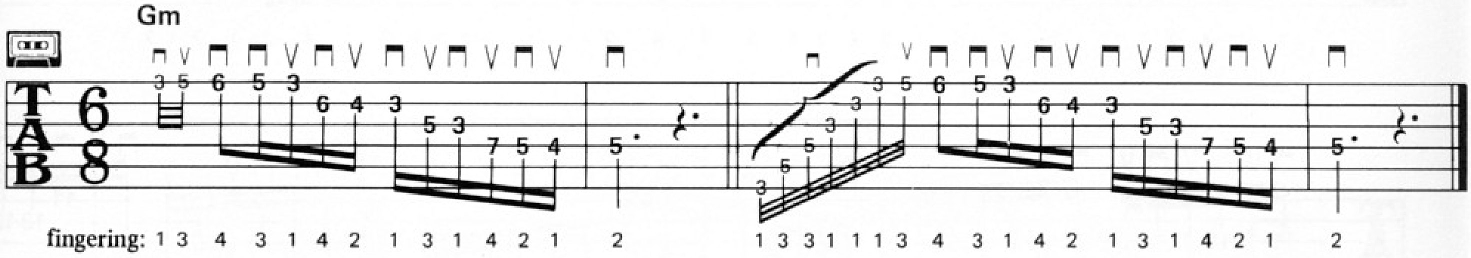
Listen to the following examples on the cassette and pay close attention to the picking.



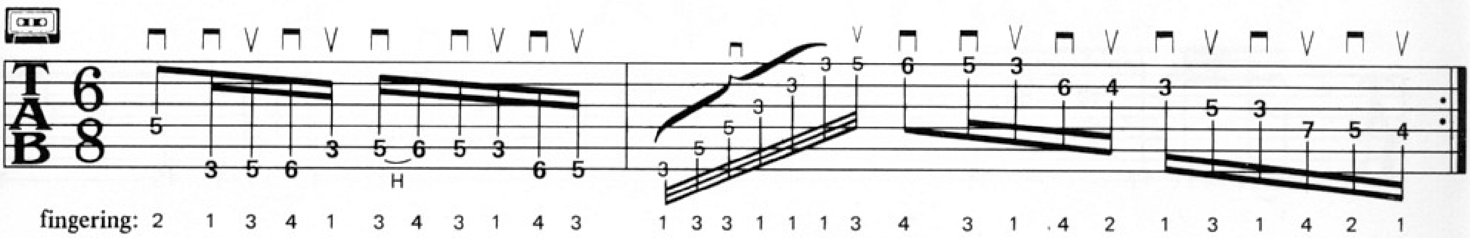


The beginning section of the 10th Caprice by Niccolo Paganini (1782-1845)uses grace notes and trills in a 6/8 meter, making it very challenging rhythmically (as well as mechanically!). First go over the preparation exercises below.
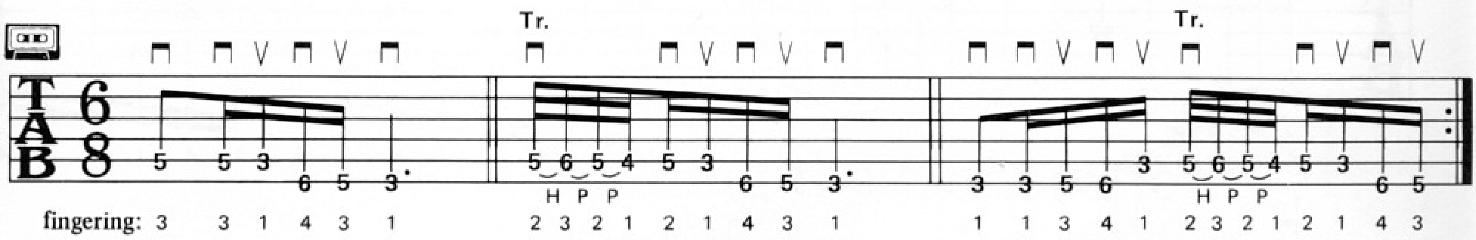
Exercise 170 introduces "grace notes," which are short, quick notes, played in time stolen from the previous note.



In Exercise 171, there isn't much time to "steal" from the preceeding note since it is only a sixteenth. "Squeeze" the grace notes in the best you can. Ideally, the beat should only slightly hesitate, if at all, but don't sacrifice articulation for speed.

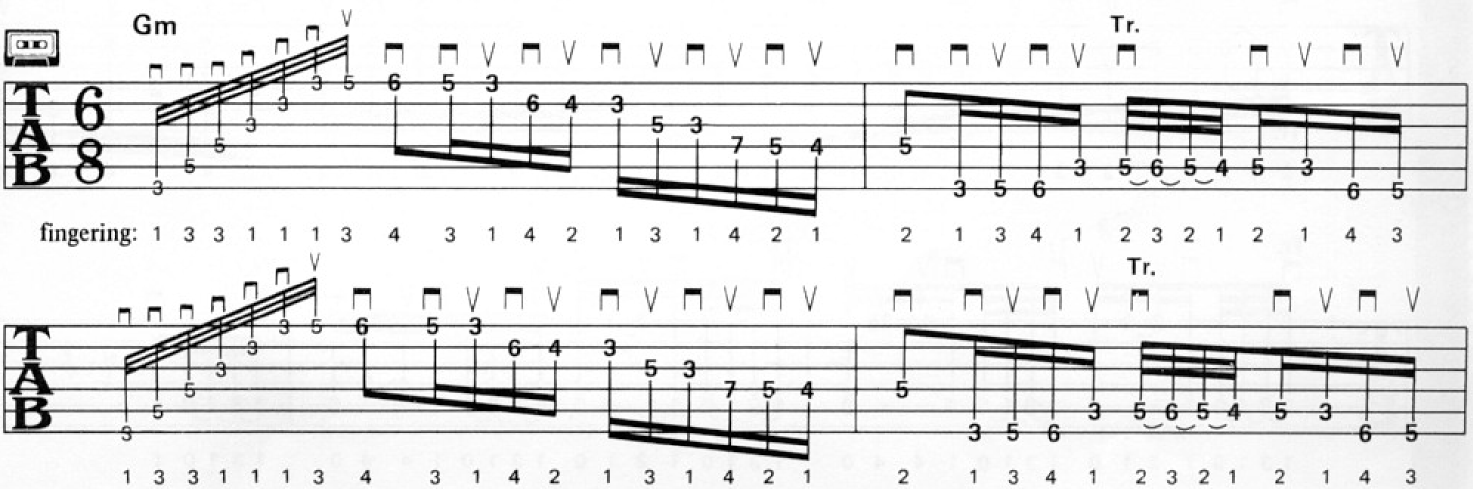


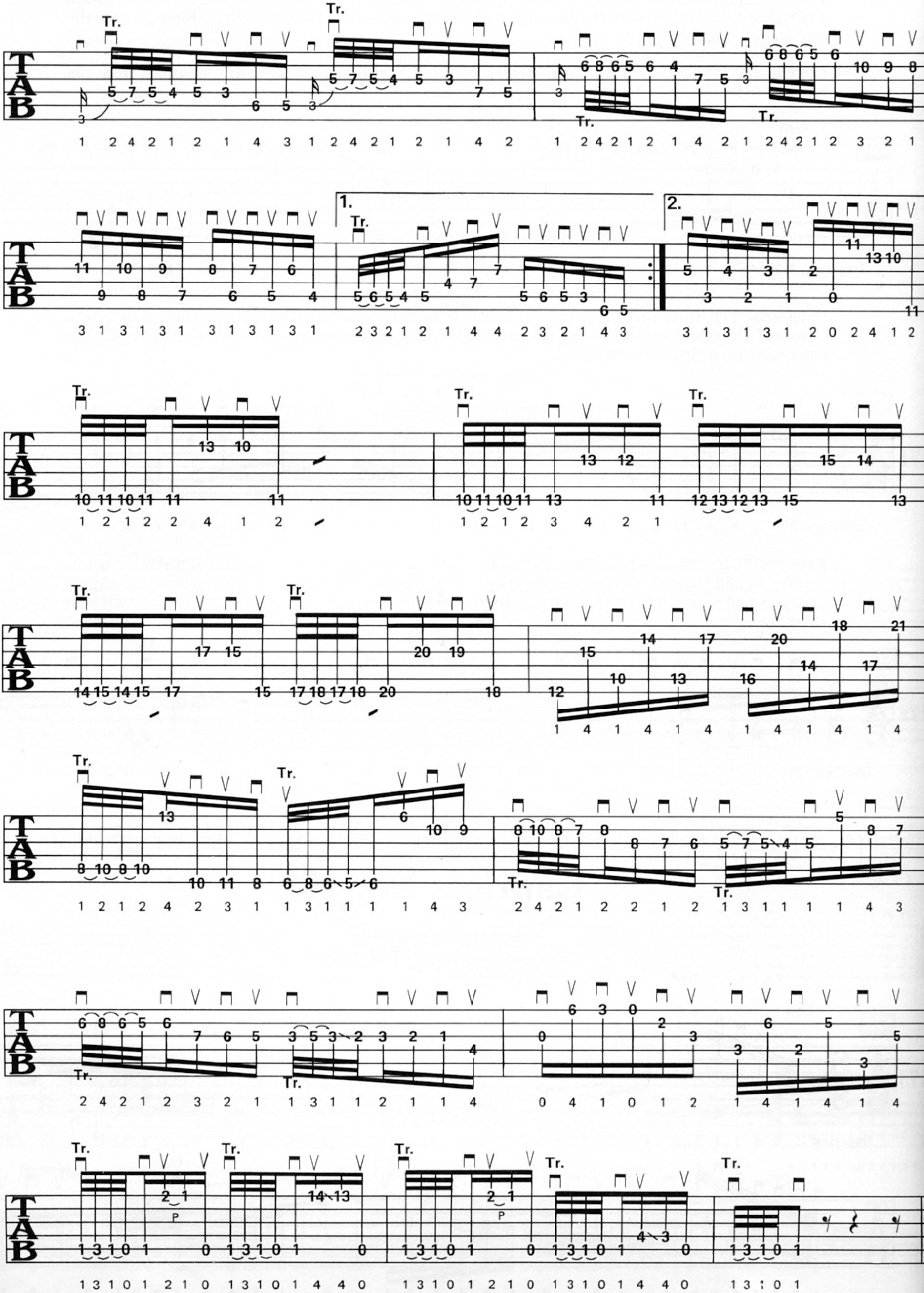
Exercise 172 introduces a trill. First, the beat is played without the trill. Get used to this rhythm before you try to add the trill. Notice that the trill uses all hammers and pulls—so your picking should not change when you add the trill. Concentrate on keeping your picking the same and it will help your rhythm.



"Caprices No. 10"

(beginning section)
Niccolo Paganini (1782-1845)




Tr.
1.
2.
P

PART THREE

STYLE

Musical Value

SETTING, THEME, AND STORY
INTERVALS
MELODIC TENDENCY
"PRELUDE IN D"

Building the Connection

SCALE/VOICE INTEGRATION
INTERVAL RECOGNITION
FRETBOARD/VOICE INTEGRATION

Creative Soloing

"OUTLINING" A SOLO
MAKING IT MOVE

Guitarists first learn scales as dot patterns to be memorized. But when notes are viewed as just so many dots to be ordered in different sequences, why play one note rather than another? Why hold a particular note longer than another? For that matter, why even play any notes?

The answer is that notes have musical value. When placed in a particular arrangement, they make a statement or convey a certain feeling. Playing guitar is not only a physical accomplishment like typing or juggling. It is a musical accomplishment as well.

"Mechanical Ability" and "Rhythmic Ability" dealt with *how* and *when* to play the notes—the physical accomplishment of playing. However, the most important question of all is *what* notes to play. After all, creating and playing music (not exercises) is the goal. You can learn to develop your own creativity. First let's define just exactly what creativity means to the guitarist...

Creativity is "the ability to bring something into existence by imaginative skill." It is the ability to invent something new. What is invented, or created, is music.

In the beginning, a guitarist copies licks and solos from others, then begins "reshuffling" these licks to create his or her own licks. Although this requires a certain amount of creativity, simply rearranging others' licks is definitely not the crowning achievement. No new music has really been created.

Hopefully, with time and practice the guitarist begins to create music that sounds less and less like that of others, and more of a unique character comes through. Ideally, a style is defined—new music is created. Most lead players will agree that developing their own style is a most important goal.

STYLE

Having a lead style means that there is something that differentiates your soloing from others.

At first the licks, scales, phrases and solos that you learn and practice form your "vocabulary" of music. Since you can only express yourself within the "language" that you have learned, your licks will probably be similar to those you have copied. However, as your ear develops, you begin imagining melodies and licks in your mind. As you listen more and more to your ideas, you start to leave the other licks behind. Eventually, your "vocabulary" will become completely your own.

Notice that the key to defining your own original "vocabulary" (or style) is in listening to your own ideas— playing what you imagine in your mind. To do this, you have to develop the ability to imagine melodies and licks. The imagination channeled into music is called your "inner ear."

Beginning with your "inner ear," you must be sensitive to the feelings associated with tones and melodies. Then you must be able to channel these feelings into musical ideas, and find them on the guitar. Finally, of course, you must be able to make the necessary movements to play the notes.

Developing your own style is a consequence of developing each step of this process, from the inside out. The "outermost" aspect has already been covered (the physical movements to play the notes). The next section, "Musical Value," focuses on developing your "inner ear"—your musical imagination. Then "Building the Connection" features exercises to help you translate these ideas to the guitar more easily.

Musical Value

The "musical value" is the "feeling" value of notes and phrases. As a musician you should develop your sensitivity to it. Become more aware of the moods and feelings that music has to offer. In "Setting, Theme, and Story," you will see some specific examples of what I mean. Also, the next two sections will help you to hear the different "flavors" of intervals and the subtle leanings of melody notes.

THEME, SETTING, AND STORY

In a novel, the "setting" refers to the time, place, mood and atmosphere in which the story takes place. The "theme" refers to the overall subject or most important topic. Music also has a setting and theme. The sound of the instruments used and what they are playing establish a kind of setting, or feeling of a particular style. The theme will be specific musical ideas that work within the setting, and define it to a more specific feeling.

As you listen to different bands, be aware of the different feelings. Does it sound funky, mechanical, bold, heavy and brooding, triumphant, funny, dreamy, mysterious, mystical, etc.

For example, listen to "*Dreams*" by Van Halen. The feelings that it gives might include: strong, confident of sucess, happy and uplifting (major). Also, the confidence that it expresses seems to make one reflect on things with a little more perspective with perhaps a more removed, almost philosophical outlook. And this is reinforced by the words.

Now listen to "*Jamie's Crying*," also by Van Halen. Listen to the sarcastic, almost sassy mimic of crying ("aww—isn't that too bad!) in both the lead guitar and the choruses.

Listen to the easy, light, swing of the verses and the contrast to the bold chorus in Aerosmith's "*Walk This Way*." Or how about the "spaced out" dreaminess of Pink Floyd's "*Comfortably Numb*," or their perfect representation of the bleak 1984ish mechanistic mood in "*The Machine*."

How about the sheer weight of Metallica in "*Master of Puppets*"—serious, dark, and intense. The driving, crunching guitar and screaming vocals would surely trample any sane thought. Or the doom-laden "horror show" sounds of other speed metalers (Anthrax, Slayer, etc.).

Listen to the hard driving, but pop oriented sounds of bands such as Def Leppard, Scorpians, Dokken, Cinderella, Ratt, and White Lion, or the more straight ahead heavy metal sounds of Judas Priest, Ozzy Osbourne, Dio, and Queensryche.

In addition to a setting and overall theme, a composition tells some kind of story—musically and lyrically—and a good story has to go somewhere or it gets boring. The same thing applies to soloing. A good solo has some action or movement in it. It is not static. A high note may leap out suddenly and surprisingly, then the melody may sink down, as if to counter balance or apologize. As notes climb higher one after another, the melody strives higher. Some lower notes may intervene and act as a setback. A short burst of notes may end with a question mark, followed by a reply. Then the question is rephrased, and the reply more emphatic. The melody may climax on the highest note, then descend skipping, like an afterthought, back down to the beginning, tying it up into a tidy little package.

Be aware of these things as you listen to solos. Only after you can hear it, can you begin to think in terms of musical "stories" of your own.

An awareness of all of these things will help you develop your inner ear, so that you can make your music go somewhere. You will gain a larger perspective from which to draw. It will help you to pick up the good ideas that you hear when you listen to music. If the notes sound good, there is a reason, but it might not be obvious by just learning the notes. Sometimes, you have to step back and try to see a larger perspective—what is happening at this point in the music?

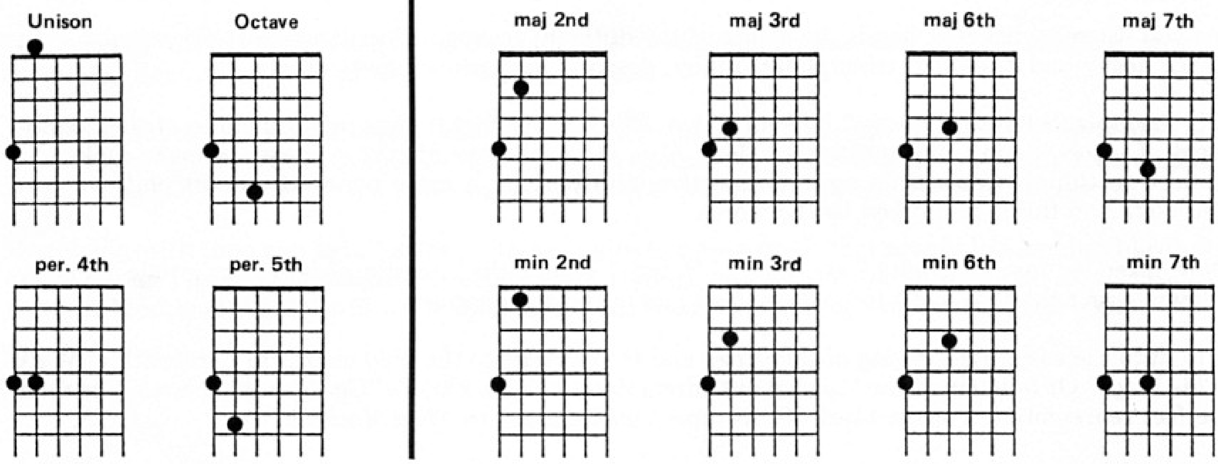
INTERVALS

An interval is the distance between two notes. When the notes are played together it is called a *harmonic* interval, when the notes follow one another it is called a *melodic* interval. Here, harmonic intervals are the focus.

When two notes are played together, you hear three things: two notes a plus third component—the way they blend together. Each interval has its own qualities.

The intervals are numbered from the notes of the major scale. They are divided into two categories: perfect and imperfect. The imperfect intervals have major and minor versions. The major versions are found in the notes of the major scale, the minor versions are found by flatting (lowering) them a half step (one fret). The perfect intervals do not have major/minor versions.

174 **Perfect:** **Imperfect:**



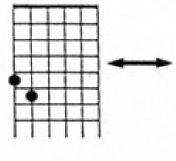
The most obvious distinction between intervals is the level of consonance or dissonance—that is, whether the notes blend well together or not. The chart below shows the intervals with their relative levels of consonance or dissonance .

Unison	Octave	Per. 5th	Per. 4th	maj 3rd	maj 6th	maj 2nd	maj 7th

← consonance ——— dissonance →

Beyond this, each interval has its own particular "flavor." Play and listen to each interval above, and see if you can identify with any of the descriptions below.

Unison and Octave:	same note, fits perfectly together without interaction, sounds thin
Perfect fifth:	strong, hollow, stark, empty, barren
Perfect fourth:	less consonant than fifth, wants to fall to major third
Major third:	colorful, happy, satisfied, restful, no need to move
Minor third:	delicate, sad, dark, mournful
Major sixth:	colorful and happy as major third, but not as restful, falls to fifth
Minor sixth:	sad as minor third, but leans strongly on (wants to fall to) the fifth
Major second:	turbulant, dissonant, suspended
Minor second:	very turbulant, dramatic, leans strongly on and wants to fall to root
Major seventh:	dissonant, pulls strongly up to the Octave, also delicate and jazzy
Minor seventh:	suspended, wants to fall to major chord with root on the fourth
Diminished 5th:	very unstable, demands resolution as a harmonic interval, sounds odd as a melodic interval



The tone that you use will affect the feelings. Distortion will accentuate the powerful aspects. For example, a minor third might sound more dark or doomed instead of delicate. Of course these are purely subjective impressions, so you are certainly free to draw your own conclusions.

MELODIC TENDENCY

Some of the intervals are comfortable staying where they are while others want to move. This is called *melodic tendency*. Generally, more dissonant intervals want to move to more stable-sounding intervals, as if there is some difficulty or tension to be resolved. Moving from a state of dissonance to consonance is known as *resolution*. This is responsible for melodic tendency.

The chord tones (1st, 3rd, 5th) are the most stable sounding. Listen to and play the following exercises and notice the melodic tendencies of various tones.

175 Half-steps will pull strongest:

a) major 7th up to the octave
b) minor 6th down to the 5th
c) perfect 4th down to major 3rd
d) minor 2nd falling to the root

176 Whole-steps pull too, but not as strongly:

a) minor 7th up to octave
b) major 2nd down to the root or up to the major 3rd
c) major 6th falling to the 5th
d) perfect 4th falling to the minor 3rd (minor key)

Holding on to a note that wants to move, and resisting its resolution creates a *suspension*.

177 Common suspensions use the fourth and second:

a) fourth wants to fall to major third
b) second rises to a minor third

All of the exercises above reflect melodic tendencies only over the root note. Of course, the tendency of where any particular note wants to move changes as the chords change. But once you can hear the subtle leanings of the notes, your ear will lead you. And hearing it is the point.

Listening to music from the baroque and classical periods is good for developing more sensitivity to melodic tendency. Resolution is at the very basis of all of the movement in this music. The "baroque" period corresponds roughly to the years 1600—1750 and includes the composers Bach, Vivaldi, and Handel. The "classical" period includes composers such as Mozart, Haydn, and Beethoven, and ranged from about 1775—1825. (A good piece to start with is Beethoven's Sonata No. 14 in C minor, also know as the "Moonlight Sonata." As you listen, try to anticipate where it will go next.)
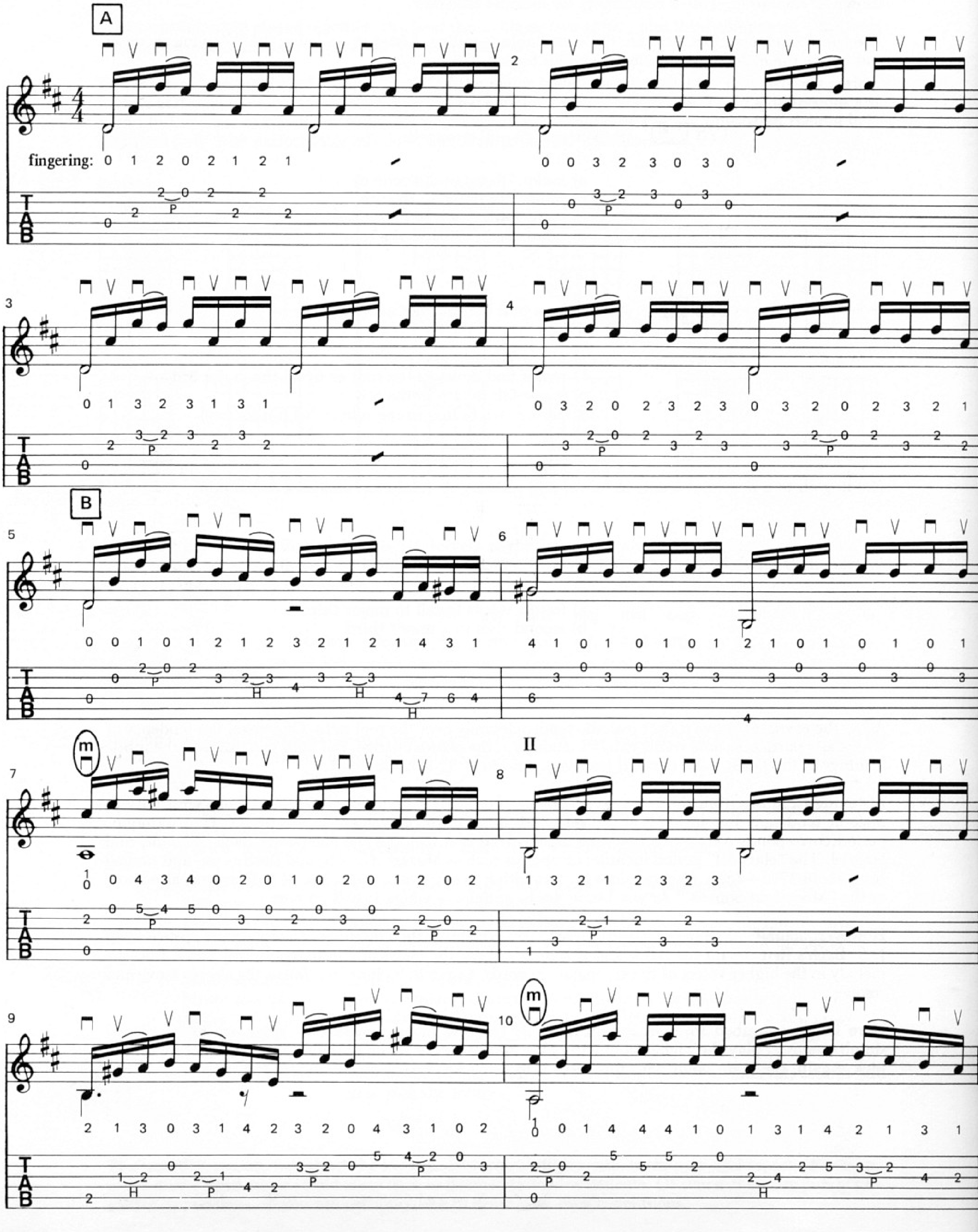
However, actually playing the music will help you even more then listening. The following piece is from J. S. Bach's first sonata for cello, and is a standard for the classical guitar repertoire. You'll find the melody in the higher voices of the arpeggiated chords. Listen to it climb and fall as the chords move and resolve.
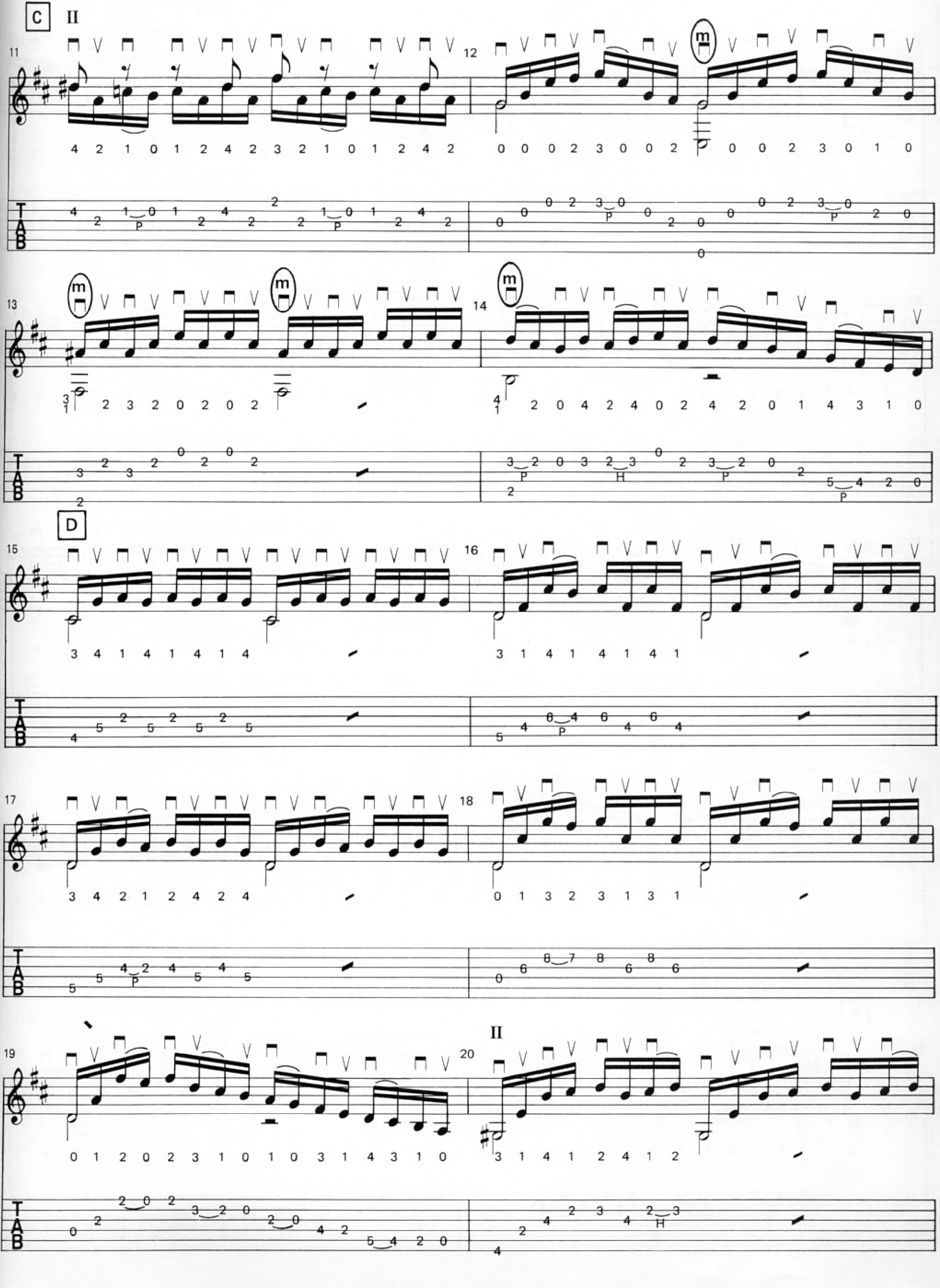
Here it is transcribed for pick-style guitar. In the few places where two notes are to be played simultaneously, play the higher note with your middle finger while sounding the lower note with the pick. Again, the main point with this piece is to listen for the subtle leanings of the notes.
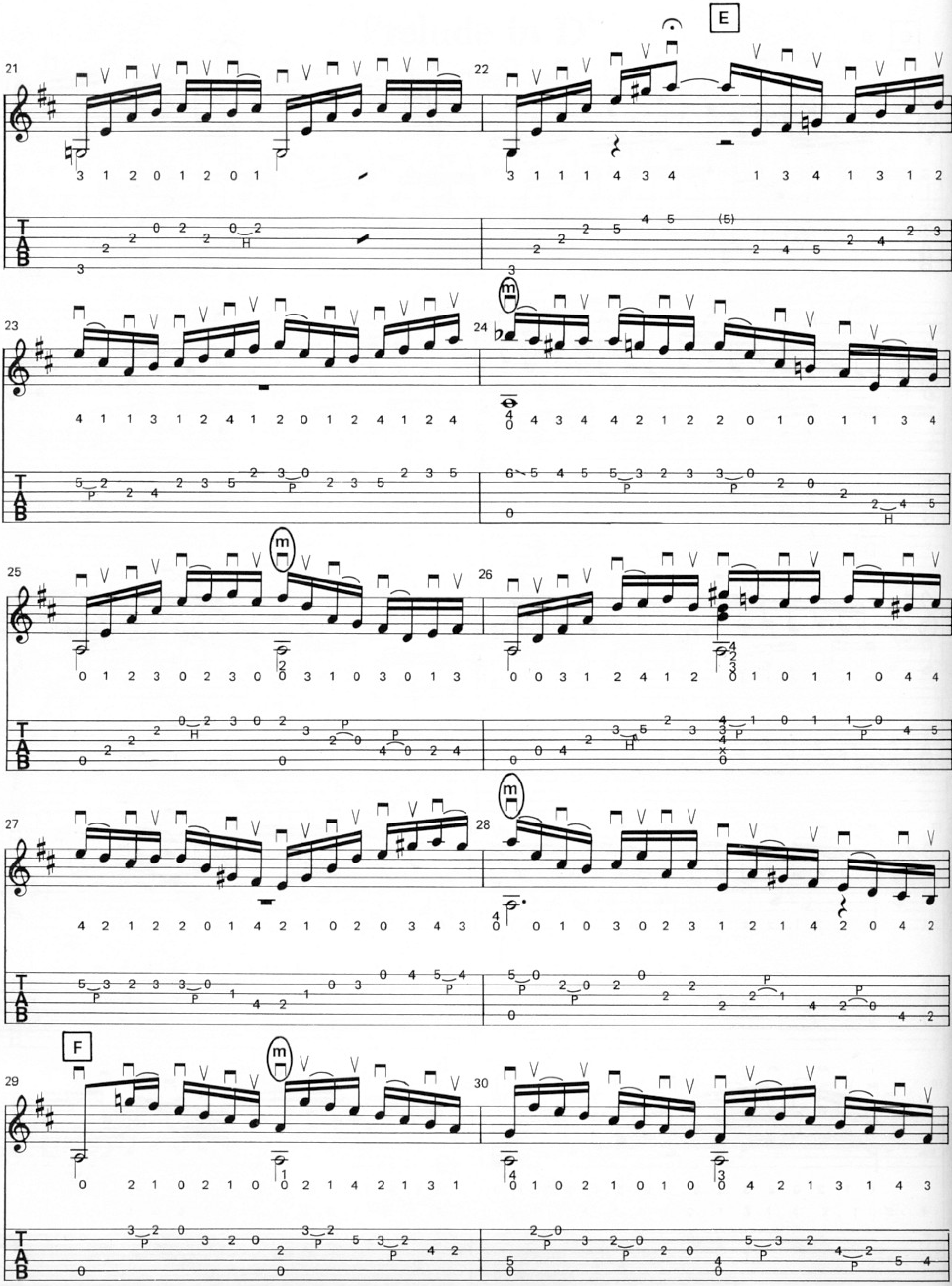
"Prelude in D"
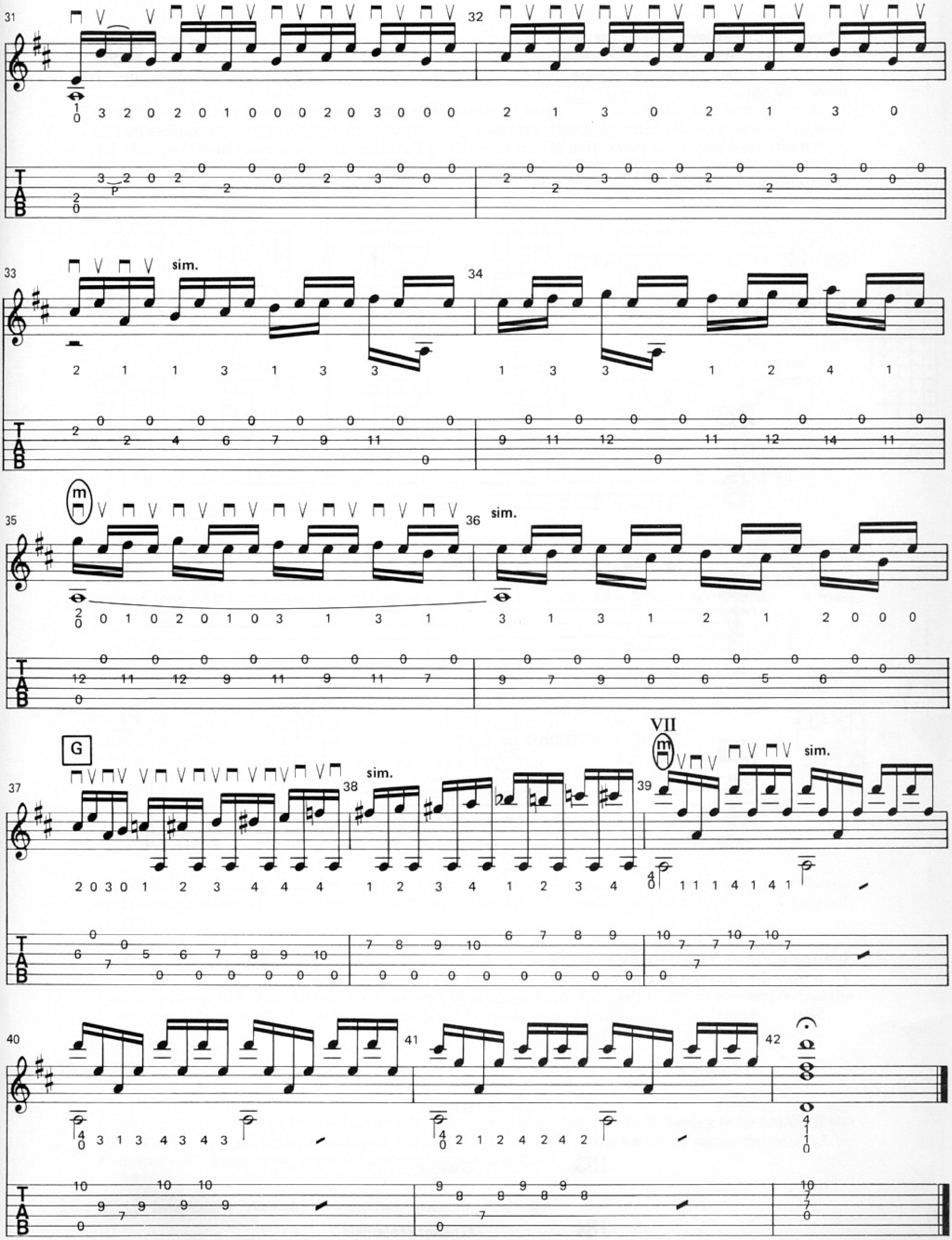
178

J.S. Bach (1685—1750)




C
II
D
II
m


E
F


sim.
m
G
VII
TAB

Building the Connection

If you ever had an idea in your head but can't seem to get it out quite right, or, by the time you've found the first few notes you've lost the essence of the idea, the problem may be that your ideas are too vague. You're not thinking in terms of notes that have a definate enough pitch. These musical ideas must be more concrete.

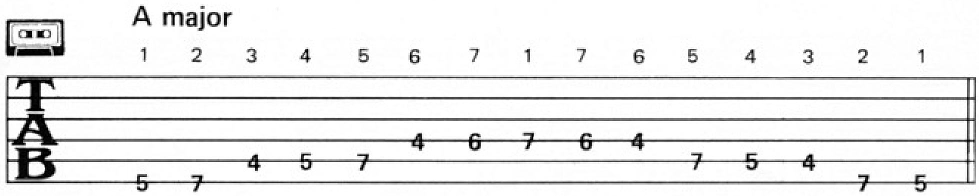
Your voice is very closely integrated with your thoughts. If you hum a pitch, you can be quite sure that your mind has a very clear perception of that note. If, on the other hand, you can't hum the pitch, it is because you do not have it clear enough in your mind to be able to express it. In a sense, the voice is just an extention of thought. If you know a pitch clearly enough to hum, then you really know it.

SCALE/VOICE INTEGRATION

In the exercises below, play the lowest note and hum or sing its pitch. Continue up each note of the scale and back down. The scale tones relative to the tonic are shown above each note.

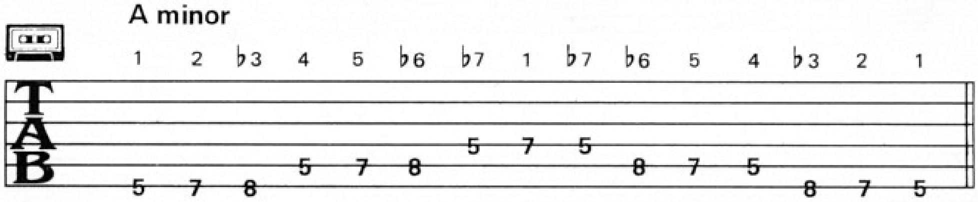
A major

179
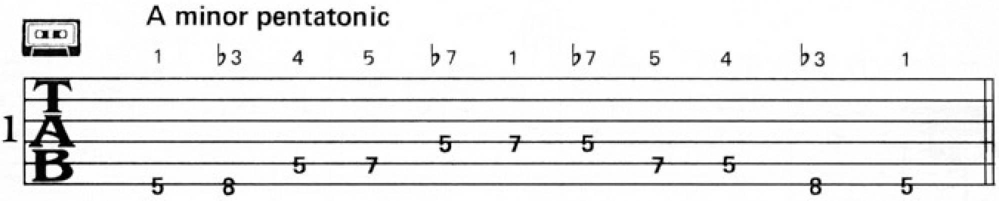


A minor

180



A minor pentatonic

181



Starting as before, take the same scales and try humming each note of the scale *before* you play the note. Then play the note just to check yourself. This time, we'll use the Key of G.

182 G major

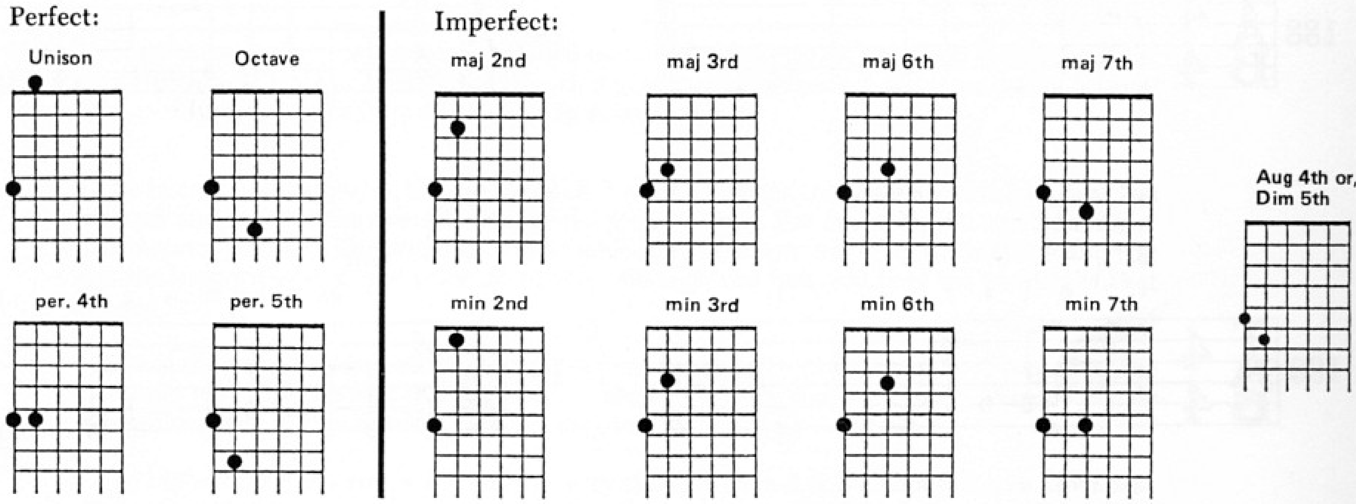
183 G minor

184 G minor pentatonic

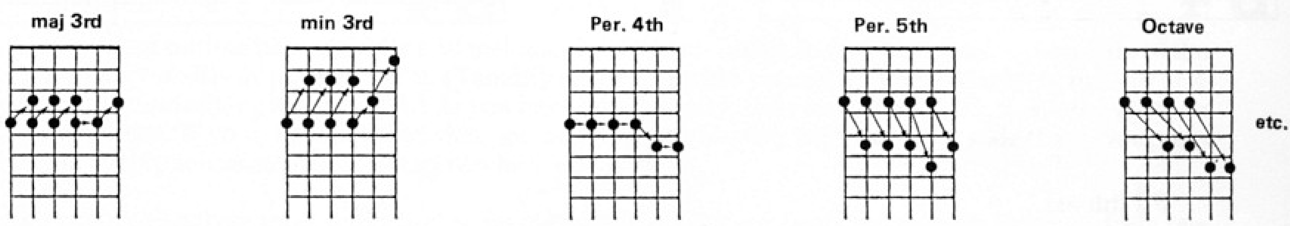
INTERVAL RECOGNITION

When you are given the pitch of one note, the ability to know the pitch of any other note is known as having "relative pitch." Developing relative pitch will enable you to learn music much faster and easier "by ear." (In fact, eventually you can learn a song just by hearing it and know how to play it before you even touch the guitar!) It will also help you to grasp the music in your imagination more clearly.

To do this you must know two things—what the intervals look like on the guitar and how they sound. First, you must memorize the interval patterns on the guitar:



These patterns remain the same starting on any string except when the interval pattern crosses between the second (B) string and the third (G) string. In this case, the higher note must be raised one fret to maintain the same interval. (This is because each of the strings on the guitar in standard tuning is a perfect fourth [5 frets] apart except the second and third strings which are only a major third [4 frets] apart.)



For the following ear-training exercise, first an interval is named, then a root note is given. Play the correct interval. After a few seconds, the interval is played on the cassette so that you can check yourself.

185 Intervals—Given interval name and root note, play the correct shape on the guitar.

For the next exercise, first an interval is named, then a root note is played. Hum the correct pitch of the second note. After a few seconds, the second note of the interval will be played to check yourself.
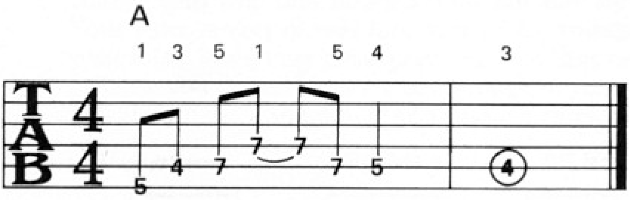
186 Intervals—Given interval name and root pitch, locate (hum) the second pitch.

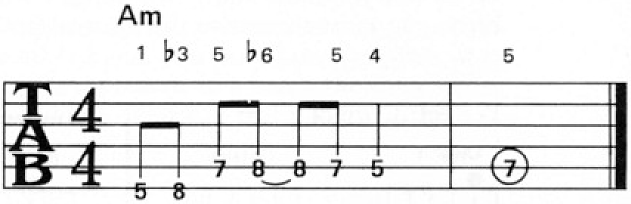
Here, the two notes of an interval are played. Try to name the interval by listenting to its sound. If you don't recognize it yet by its sound, you can sing up the scale from the tonic and count the notes. After each exercise, the interval is named so you can check yourself.

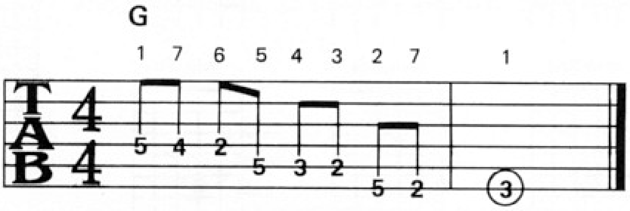
187 Intervals—Given the two pitches, name the interval.
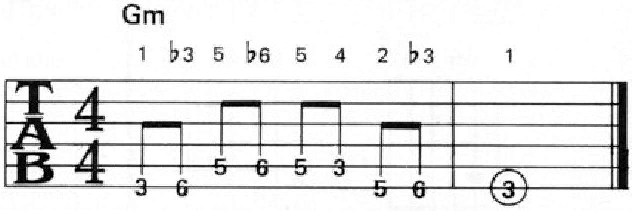
FRETBOARD/VOICE INTEGRATION

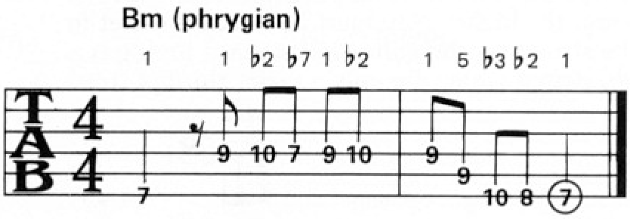
Here are a few melodies using various scales. Play/sing through these slowly, then try improvising some of your own melodies. Exercises 194 and 195 use chromatic passing tones (notes that are not in the key).

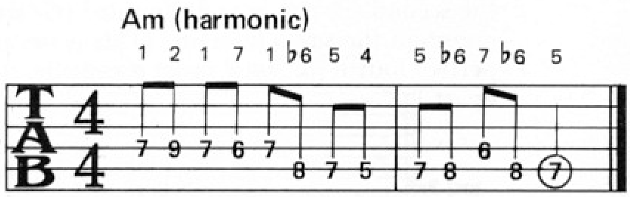
188

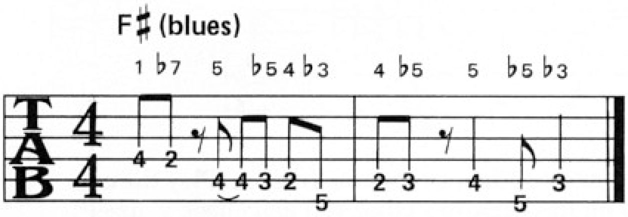

189


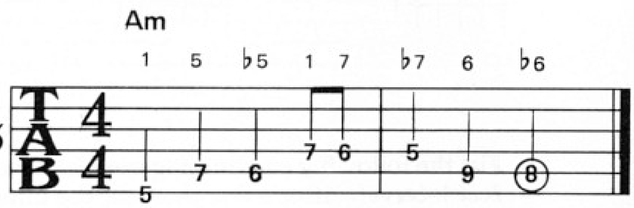
190


191


192


193


194


195


At this point, you should be able to picture the fretboard in your mind, hum a melody, and simultaneously picture the fret that you would play to sound each note you are singing. You can practice like this anytime you are by yourself and don't have your guitar in hand. You can even practice like this silently—creating riffs and melodies all in your mind. You're building a bridge directly from your imagination to the guitar—as you think the melodies, you can visualize the note patterns.

As you develop the ability to imagine notes more clearly and to know where they lie on the fretboard, the music you create will come more and more from melodies that you hear in your mind. It'll come from your musical creativity, and not from reshuffling dots in a pattern. You are on your way to really expressing yourself through the guitar, and developing your own style. Everything you listen to will begin to affect your playing because it affects your imagination—it affects what kind of musical ideas occur to you and where your ear wants the notes to move.

Creative Soloing

"Melody" is a succession of pitches. Some melodies are catchier and more singable than others, and these are often referred to as being "melodic." Since a singable melody can't be too fast, "melodic" generally means slow to lead guitarists. However, a melody doesn't have to be slow, and the same melodic tendencies that make a slow line sound good (melodic) will make a fast line sound good. To apply the ideas of melodic tendency to faster soloing, you just have to know how to find the more "important" notes.

HOW TO "OUTLINE" A SOLO

Not all notes are created equal. Some notes stand out alone, while others only lend a small contribution to create a sum effect. Here are some principles that govern what notes will stand out more. By applying them, you can find the more important notes in a faster solo.

- The faster the notes go by, the less value each one has. When the notes are fast, you hear less of each and more of the overall effect of the group or run. For example, if a run is in minor pentatonic, you hear the "feeling" of that scale. Or if the run moves up the major scale, you get the happy sound of that scale. If an arpeggio is played fast, you hear the tonality of that chord.

- Within the run, the particular notes that fall on downbeats will be naturally accented by the listener's ear. Also the first and last notes of the run usually stand out more. When a run or riff comes back to one note repeatedly, that tone is stressed.

- The highest note in a run will stand out very strongly even if it does not fall on a downbeat and, of course, any note that is paused on will stand out to the listener.

"Outline" your solo by dropping out the less essential notes. Now, the notes that are left form a sort of "skeleton" or framework. Make these notes move melodically and your solos will go somewhere.

MAKING IT MOVE

Analyze your outline harmonically and melodically. Harmonically, look at how these notes relate to the underlying tonality or passing chord. (Tonality refers to the key you are in. For example, in the Key of A minor, the underlying tonality is A.) As you have learned, each scale tone (1,♭2, 2,♭3, 3, 4, etc.) lends its own qualities. If your outline shows that you are generally staying with the same scale tones, your solo will probably sound stagnant. Go somewhere else with it.

You can also analyze these important notes melodically. Your ear hears the melodic intervals from one note to the next, as well as the harmonic qualities. For example, play a major sixth followed by a minor third. Harmonically, you know the effects that each tone offers, but when played one after another, your ear will hear the melodic interval of a diminished 5th. Analyze your outline for melodic leaps as well.

One key principle to be aware of is *continuity versus contrast*. Notes derive their qualities from the musical context surrounding them. If a pattern is established, the notes that break the established pattern will get more attention. You can accomplish this by starting a sequence in a scale and then breaking it, perhaps by changing the type of sequence, changing the scale, or just stopping on a note. You can establish a rhythmic motif (a recurring rhythm fragment), then change it. Or you can play up or down a scale without skipping any tones (conjunct motion), then use some melodic leaps (disjunct motion). By first establishing some sort of continuity, then breaking it, the contrast will create variety and the contrasting part will stand out more.

As you listen to the following solos, notice how they move. All of the techniques mentioned above, and more, are incorporated in them. When writing them, however, I didn't think of any specific points: I just listened to my inner ear, and the musical ideas presented themselves.

196

a) Listening exercise—solo to "The Fiend" ℗1988 Troy Stetina

b) Listening exercise—solo to "Olympus" ℗1988 Troy Stetina

c) Listening exercise—solo to "Better Days" ℗1988 Troy Stetina, Shauna Joyce

Analyze a few solos so that you understand these principles. Of course, you don't hold any specific theoretical ideas in mind when writing or playing, you simply follow your imagination. But somehow it rubs off on your creativity. If a solo sounds interesting, chances are some of these principles will be in there.

I hope that you've enjoyed this book. If you have any thoughts or comments about the material presented, you may write to me at the address below. Good luck!

Sincerely,

Troy Stetina
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1584 North Prospect Avenue
Milwaukee, WI 53202 USA

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